

Investigating compliance with SME- friendly procurement policy

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Declaration

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Research outputs

Publications directly related to PhD research

1. Flynn, A & Davis, P (forthcoming). The policy-practice divide and SME-friendly public procurement. *Environment and Planning C: Government and Policy*
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5. Flynn, A. Davis, P. McKevitt, D & McEvoy, E (2013). Mapping public procurement in Ireland. *Public Procurement Law Review*. Vol. 2: 74-95
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Conference presentations

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| 2013 | International Purchasing and Supply Education Research Association (IPSERA) PhD summer school, Salzburg, Austria |
| 2013 | Irish Academy of Management, Waterford, Ireland |
| 2012 | International Public Procurement Conference (IPPC), Seattle, U.S. |
| 2012 | Irish Academy of Management, Maynooth, Ireland |

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Investigating compliance with SME-friendly procurement policy

Anthony Flynn

Abstract

This study investigates compliance with SME-friendly policy in public procurement. Two research questions guide the investigation. The first is the extent to which policy is being complied with. The results, which are based on 349 public buyer survey responses, reveal compliance to be moderate; indicated by a mean score of 14.54 out of 22 on the compliance index. The second question concerns the impact of institutional forces on policy compliance. A predictive model informed by institutional theory is used to test these impacts. The model is significant and accounts for 27 per cent of the variance in policy compliance. Perceived consistency of institutional rules in public procurement, compatibility of SME-friendly policy with organisational goals, and organisational dependence on the state positively impact compliance. The constraining effect of SME-friendly policy on professional discretion has a negative effect. While not directly significant, social legitimacy, perceived diffusion of SME-friendly practices and coercion do indirectly influence policy compliance in interaction with procurement experience, procurement involvement and organisation size respectively.

A number of contributions arise from this study. Empirically, it provides among the first survey-based insights into what public buyers are doing to facilitate SMEs and the institutional factors that support or inhibit them in doing so. This is important as academic interest in SME-friendly procurement policies has not been matched by evidence on their implementation. Theoretically, it is novel in its application and operationalisation of institutional theory to explicate compliance behaviour in public procurement. Research on this topic has been largely a-theoretical to date. Methodologically, it is responsible for creating the first index of SME-friendly procurement practices. The study contributes to policy-practice by identifying several areas that can act as levers for the more effective translation of SME-friendly policy, including: policy monitoring and the professionalisation of public sector purchasing. The study alights on recommendations to take this line of inquiry forward. Relevant here is examining the effects of policy compliance on SMEs' participation and success rates in contract competitions, undertaking cross-comparative research and triangulating research methods.

Introduction

Research topic

Small and medium-sized enterprise (SME) involvement in the marketplace for public sector contracts is an area which pre-occupies elected representatives. The reason for this is simple. All the available evidence indicates that SMEs struggle to compete in public tendering competitions and are under-represented as public sector suppliers (Cabinet Office, 2013; GHK, 2010; Kidalov, 2015; Pickernell et al., 2013). Without doubt something akin to market failure exists. This is neither desirable nor tenable if governments are serious about fostering dynamic economies with SMEs as the engines of innovation and employment creation (Bannock and Peacock, 1989; Storey, 1994, 2003). Accounting for, on average, 12.8 per cent of GDP and 29 per cent of total government expenditure across developed economies, the public procurement market is too commercially important for SMEs to miss out on (OECD, 2013). Not only does SMEs' under-representation limit their growth prospects, it also means that the supply marketplace is not as competitive or as diverse as is optimal. Public sector organisations lose out as a result. There is no single cause of SMEs' experienced difficulties in public sector tendering. Myriad environmental and organisational factors act together to stymie their chances of success (Loader, 2013). Many of the problems are systemic, which is why governments feel impelled to take corrective action (Anglund, 1999). This has resulted in the introduction of so-called SME-friendly purchasing policies and initiatives (see Box 1).

Not surprisingly, the increased attention accorded to SME-friendly procurement at political level has come to inflect academic research. For the last two decades scholars have sought to identify barriers to SME participation in public contract competitions (Bovis, 1996; Erridge, Fee and McIllroy, 1999; Greer, 1999; MacManus, 1991; Michaelis, McGuire and Ferguson, 2003; Ringwald et al., 2009).

By the same token they have assessed and debated the various policy initiatives designed to palliate these barriers (Clarke and Moutray, 2004; Kidalov and Snider, 2011, 2013; Loader, 2013; Nicholas and Fruhmman, 2014). To be sure, there has been plenty of engagement with both the causes of SMEs' problems in public procurement and the policies formulated by government to address them. There has been considerably less engagement with the translation of these policies into everyday procurement practice (Blount and Hill, 2015). Stated succinctly, interest in SME-friendly procurement policies has not been matched by evidence on their implementation. This represents a significant omission; one that limits our ability to understand SME-friendly procurement. Consistent with opinions expressed elsewhere, it cannot be assumed that government pronouncements on a more SME-friendly procurement system will be complied with at organisational level and realised in practice (Hasselbalch, Costa and Blecken, 2015; Murray, 2012). Saying SMEs should be better supported is easy, but making it a reality is an altogether different proposition (Bennett, 2008).

Box 1 SME-friendly public procurement in Ireland¹

On the 8th of November, 2012 the New Park Hotel in Kilkenny played host to the third in a series of Meet the Buyer events. Organised by Inter Trade Ireland, the event attracted almost 500 supplier representatives as well as buyers and category managers from over 40 public sector organisations. Opening the proceedings, Minister of State for Small Business, John Perry T.D. spoke passionately about entrepreneurship rejuvenating the Irish economy. Turning to public procurement, he remarked on its enormous potential to support this process of economic rejuvenation by ensuring that SME suppliers have the opportunity and the incentive to compete in the public sector marketplace. Implementing this 'broader agenda' for public procurement, as he called it, was critical not only to growth and employment creation across the SME sector. It also helped the state to achieve better value for

¹ The candidate was in attendance at the events referred to in Box 1.

money. Reiterating this theme, delegates heard Vincent Campbell, Director of the National Procurement Service describe the steps being taken to make tendering for public contracts less onerous and bureaucratic. Bringing proceedings to a close, Des Armstrong, Director of the Central Procurement Directorate of Northern Ireland, outlined the importance of integrating public procurement with the agenda for SME competitiveness. Like the assembled public buyers and suppliers in the New Park Hotel, public procurement and enterprise policy were also being brought under the one roof.

The sentiments expressed in the New Park Hotel were to be heard again at subsequent Meet the Buyer events in Belfast (Sept, 2013) and Dublin (November, 2013). Minister of State at the Department of Finance, Brian Hayes T.D. and Paul Quinn, Director of the newly established Office of Government Procurement, Ireland were there to tell attendees of policy initiatives under way to make public sector tendering more accessible to small suppliers. A more business-friendly public procurement system that was open to all firms, irrespective of size, profile or experience was what was promised. As the Minister noted: ‘the public sector is a significant market for small businesses, so improving our public procurement practices by removing obstacles and encouraging the involvement of SMEs is a key priority’. Plans for further aggregating the purchasing requirements were also mentioned as part of a more strategic and efficiency-driven approach. Quite how aggregated purchasing and centralised framework agreements could be reconciled with the SME inclusion agenda was not made clear. Even so, the message that public procurement was in need of reform and that the government was committed to taking the necessary action was unmistakable. If this message was targeted at encouraging SMEs, it was equally targeted at soliciting the co-operation and goodwill of public buyers – the actors ultimately responsible for translating policy aspiration into everyday procurement practice. How would they interpret and respond to these institutional pressures for SME-friendly procurement?

Research rationale

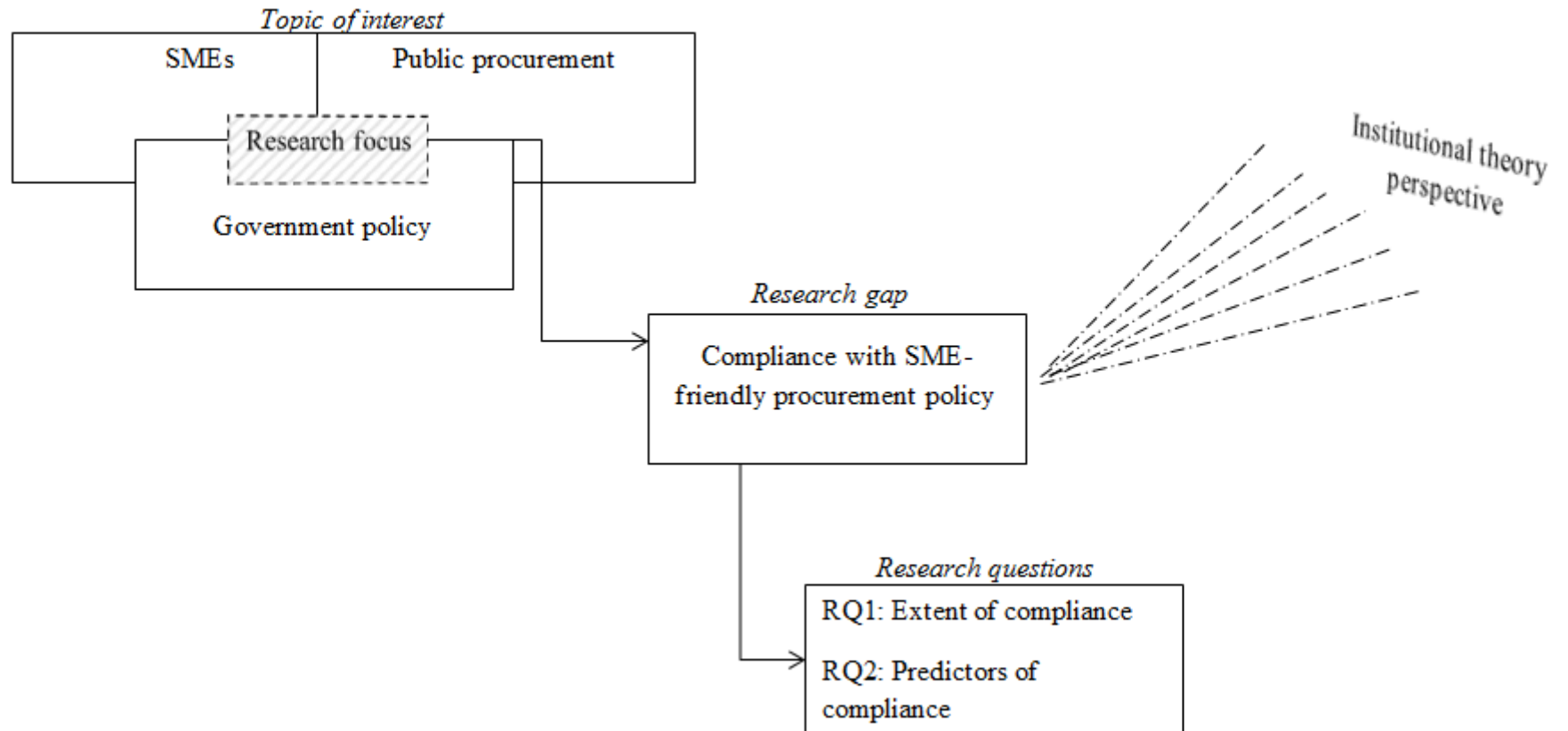
This study is a response to the paucity of research on compliance with SME-friendly procurement policy. Its overriding objective is to determine how SME-friendly

procurement policy is working out in practice, using Ireland as the research context and public buyers as the research informants. This means providing evidence on the extent of Irish public buyers' compliance with SME-friendly policy and the factors that promote or inhibit compliance. As such, there is a descriptive and an explanatory dimension to the study. Compliance is examined through the lens of institutional theory (see Fig. 1, pg. 7). Why is compliance with SME-friendly procurement policy worth investigating? In an academic sense, having answers to what public buyers are doing in respect of SME-friendly policy and why they are doing it addresses a significant gap in the literature. At a more overarching level, pursuing this line of inquiry helps to strengthen the scientific basis of SME-friendly procurement through its empirical observations, theoretical grounding, explanatory depth and methodological sophistication. For example, it stands as among the first nationally representative surveys of a public buyer population. It also breaks new ground through its application of institutional theory for explaining and predicting compliance behaviour. As will be demonstrated in chapter two, the use of institutional theory, or any theory for that matter, has been noticeable by its absence in discussion and empirical testing of SME-friendly procurement policy.

Questions around SME-friendly policy compliance are also pertinent outside the academic domain. For a start, they help to reveal what progress is being made towards effecting SME-friendly procurement – something that is of direct relevance and consequence to the main public procurement stakeholder groups: elected representatives, policy makers, public sector organisations, the business community and their representative associations. Making a determination around policy compliance also prefigures any assessment of the impacts of SME-friendly policy. The policy literature is clear in stating that we must first ascertain whether a policy

has translated into practice before we can begin to evaluate its effects (Beyer, Stevens and Harrison, 1983). Investigating policy compliance is important because it is what happens in practice that ultimately affects SMEs' chances of competing for and winning public sector contracts, not what is contained in policy statements. Tellingly, other scholars have discovered that SMEs tend to be less critical of policy support initiatives than public buyers' adherence to them (Fee, Erridge and Hennigan, 2002). Finally, it is only through scholarly inquiry that we can begin to understand the mechanisms that support policy compliance and, subsequently, be in a position to relay this information to policy makers and other interested parties. Summarising, we can say that investigating compliance with SME-friendly procurement policy recommends itself not only for its academic value but also for its real world relevance. This pursuit of rigour and relevance is in keeping with the critical realist underpinnings of the study (Hammersley, 1992).

Fig.1 Organising framework for the study



Research findings

Prier and McCue (2009) have previously argued that institutional expectations around what public procurement should deliver are not always mirrored in public buyers' actions. This is certainly the case here where there is evidence of a policy-practice divide. Public buyers are adhering to some but not all of the SME-friendly policy recommendations first made by the Irish government in 2010 and subsequently reiterated in 2014. The average score on the compliance index, which was created for the purposes of this study, is 14.54 out of 22. Few public buyers are fully acquiescing with policy expectations - less than one per cent exhibit perfect compliance. Equally, few public buyers are acting in outright defiance of policy expectations, and all are conforming to some of the prescribed measures. Compliance rates vary significantly depending on the individual policy recommendation. Measures including the online advertising of contracts and the use of proportionate insurance cover criteria evince high levels of compliance. The same cannot be said of conducting pre-tender market analysis or publishing prior information notices (PINs), among other measures. SME-friendly policy is translating into practice, albeit in an imperfect and incomplete way. Thus far, public buyers appear to have assumed a compromise response to institutional pressures for SME-friendly procurement (Oliver, 1991). It is worth seeing this in the context of recent typifications of public buyers as 'practical idealists' and 'adapted realists' (Roman, 2015).

The findings are also clear in demonstrating that the institutional environment influences public buyers' compliance with SME-friendly policy. The predictive model derived from institutional theory accounts for over 27 per cent of the variance in policy compliance. This is consistent with theoretical predictions on the powerful

role that institutional forces play in shaping actors' behaviour, particularly within public sector contexts. The factors that directly affect compliance are: consistency of public procurement policies; compatibility between SME-friendly policy and organisational goals; dependence on the institutional rule setters - government; and the constraining effect of SME-friendly policy on public buyers' professional discretion. As hypothesised, the first of these three factors promote policy compliance. The fourth factor inhibits it. The findings provide among the first insights into how institutional dynamics act to encourage or inhibit compliance behaviour, as the case may be. Moreover, they lend credence to what others have previously speculated: the realisation of SME-friendly policy is contingent on how public buyers manage the multiple institutional and organisational demands made of them (Erridge, 2007; Kidalov and Snider, 2011). Interestingly, neither social legitimacy concerns nor the perceived diffusion of SME-friendly practices directly influence policy compliance. Yet significant and positive effects are observed when these same institutional factors are moderated by public buyers' experience and involvement in procurement respectively. The same situation obtains with the coerciveness of SME-friendly policy, except that it is negatively moderated by organisation size.

Research contribution

Research at the intersection of SMEs and public procurement is still at a nascent state of development and much remains to be discovered. The contributions of this study go some way towards advancing the research agenda. In an empirical sense the study offers among the first systematic assessments of how a national population of public buyers is responding to institutional pressures for SME-friendly procurement. Heretofore we could only speculate on how SME-friendly procurement policy was

being received. What figures did exist on compliance rates were either not representative or else derived from unreliable estimates. The study also unpicks the antecedents of SME-friendly policy compliance - something that has little precedent and of which there is a dearth of knowledge. These findings can now be added to what has already been established on the predictors of procurement rule compliance (Blount and Hill, 2015; Gelderman, Ghijsen and Brugman, 2006; Gelderman, Ghijsen and Schoonen, 2010; Mwakibinga and Buvik, 2013) and the adoption of environmentally sustainable supply chain management practices (Hoejmose, Grosvold and Millington, 2013; Sancha, Longoni and Gimenez, 2015; Zhu, Sarkis and Lai, 2013). In essence, the study is significant because it reveals what public buyers are doing to facilitate SME participation in contract competitions and empirically tests reasons for their behaviour.

Theoretically, the study contributes in a novel way through its application of institutional theory (Di Maggio and Powell, 1983; Meyer and Rowan, 1977; Zucker, 1987). No other study has taken an institutional view of SME-friendly policy compliance in public procurement. In fact, no other study has operationalised a theory in survey-based research on SME-friendly procurement. The benefit of a theoretically-informed approach is that debate on SME-friendly procurement is elevated from 'what' questions that produce descriptive answers to 'why' questions that produce explanatory answers. Employing an institutional theory perspective also benefits the wider public procurement field, which has under-utilized institutional perspectives. This is in spite of the heavily regulated, legalistic and normatively governed character of public purchasing (Lian and Laing, 2004). The study also brings public procurement to the attention of institutional theorists, who have so far neglected it. Methodologically, the study is notable for creating a compliance index

for SME-friendly procurement as well as devising a predictive model of same, neither of which previously existed. The way in which Ireland's national e-procurement site was exploited to identify and make contact with public buyers also represents a breakthrough in this field. Apart from its academic contributions, the study yields insights for public administrators on how to better manage the policy implementation process. These include the on-going monitoring of policy, introducing sector-specific SME-friendly policies, fostering a cadre of full-time and accredited public buyers, and enhancing the status of the procurement function.

Future research

This study is part of a conversation on SME involvement in public procurement. It does not have the last word on it by any means. There are many questions still to be answered, many debates still to be had over the coming years. What is earnestly hoped for is that the findings presented here will stimulate further engagement with issues around promoting SME involvement in the public sector marketplace. To this end several promising lines for future inquiry are highlighted. These constitute aspects deserving of investigation in their own right, but they also represent ways to improve on the empirical, theoretical and methodological content of this study. Among these is the recommendation to test the relationship between policy compliance and the participation of SMEs in contract competitions. While this is what policy makers and elected representatives envisage will happen, empirical confirmation is still required. The use of alternative theoretical perspectives is also something that researchers should contemplate. Possibilities here include principal-agency theory, which readily lends itself to any study of compliance behaviour, and expectancy theory of motivation. The latter is of special interest as, barring a few exceptions (Maser and Thompson, 2013; Ntayi, Ahiauzu and Eyaa, 2011; Preuss and

Walker, 2011), psychological theory has been overlooked in discussions on public buyer behaviour. There is also tremendous scope for methodological innovations, whether in relation to the carrying out of cross-national investigations of SME-friendly policy compliance or using more qualitative and mixed-method research designs.

Preview of chapters

There are five chapters in this study (see Fig. 2, pg. 15). The first chapter is a comprehensive review of the literature at the intersection of SMEs, public procurement and government policy. The chapter explains why SMEs have become central to academic and political discourse on public procurement, what we know of their involvement and experiences to date, and what we don't know. Included among the areas we know little about is compliance with SME-friendly procurement policies. This is the research gap or puzzle that motivates the study. The second chapter leads on from the first. It takes an institutional perspective on policy compliance. The result is a theoretically-informed account of how and why a government initiative such as SME-friendly procurement policy is understood to influence behaviour within the organisation. In turn, this provides the basis for a predictive model of SME-friendly policy compliance. The model hypothesises a series of relationships between institutional factors and the compliance behaviour of public buyers. Taken together, chapters one and two clarify the object of investigation, which is compliance with SME-friendly policy in public procurement, put forward institutional theory as a lens to rationalise and explain policy compliance, and construct a predictive model to test policy compliance.

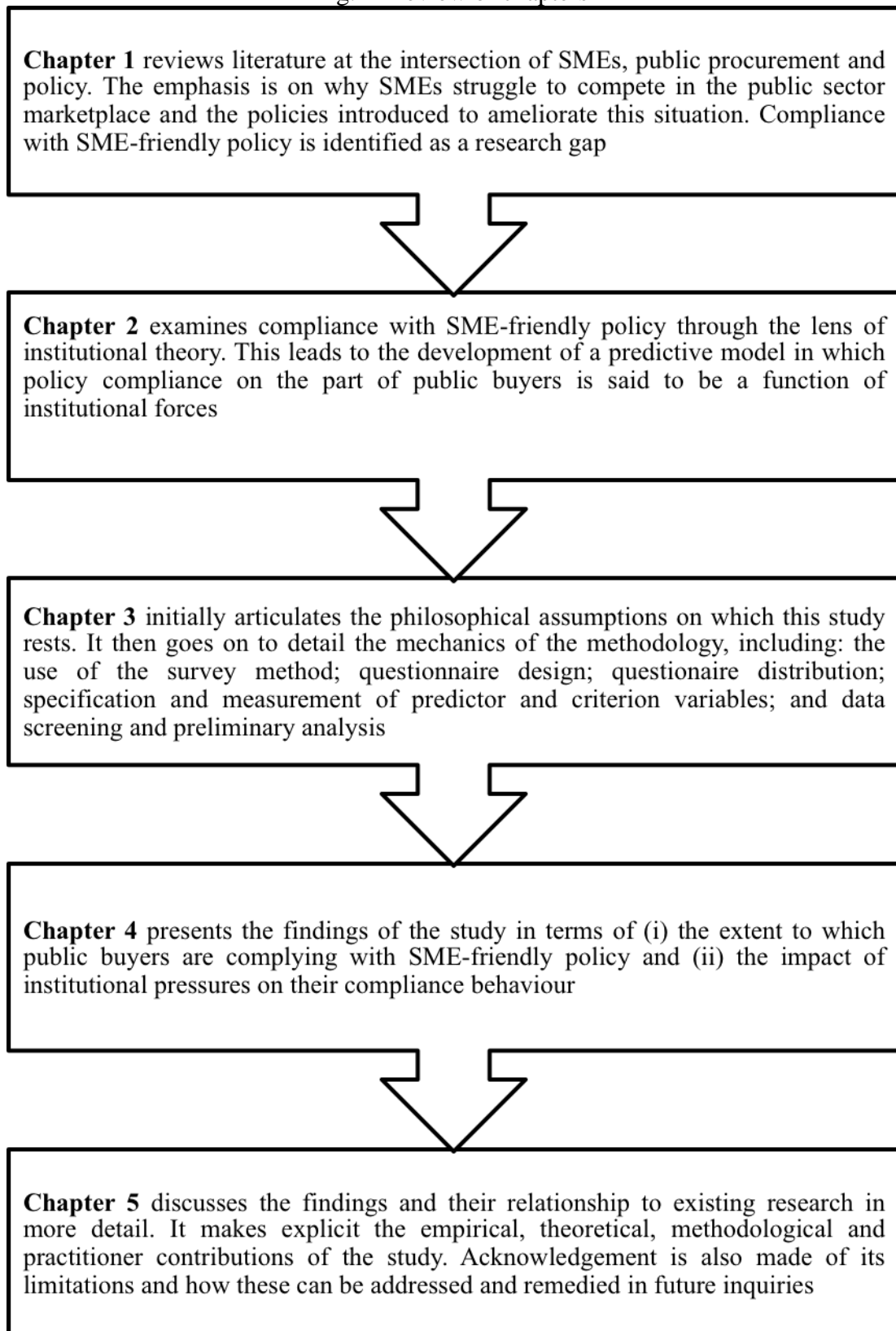
The third chapter covers methodology. There are two main parts to this chapter. The first concerns the philosophical assumptions that are made throughout the study.

These assumptions go to the heart of questions on what constitutes knowledge, what is the purpose of social inquiry and how social inquiry can and should be carried out. While there has been a backlash against philosophical dogmatism in social inquiry in recent years, it is still important that researchers evince awareness of the philosophical assumptions of their inquiries. Seale (1999a) has likened this to working out in a 'mental gymnasium'. The philosophical assumptions made here are consistent with a critical realist outlook: an external reality is said to exist; it is possible to obtain reasonably objective knowledge about this reality; and research methods originating in the physical sciences are appropriate for this task. The second part of the chapter delves into the design and implementation research aspects of the study. Relevant here is use of the survey-based approach to systematically gather data on policy compliance, the steps taken to ensure the integrity of the survey instrument, the operationalisation and measurement of the research variables and the process of data collection. The preliminary stages of survey data analysis, including response rate and respondent representativeness, conclude the chapter.

Chapter four reports the empirical findings of the study. The first section of the chapter is descriptive in form. It reveals the extent to which SME-friendly policy is being complied with. This answers the first research question. All relevant statistical descriptors are contained in this section. The second section is more explanatory. It involves testing the predictive model of compliance using a three-step hierarchical regression technique and subsequently interpreting its results. Acceptance or rejection of the hypothesised relationships between institutional pressures and policy compliance is made on this basis. This addresses the second research question regarding the impact of the institutional environment on policy compliance. Chapter five discusses the empirical findings in greater depth and interrogates what they

mean for SME-friendly public procurement. How the findings compare with, and add to, the existing body of work in this area and in public procurement generally is also assessed. The empirical, theoretical and methodological contributions that the study makes are then articulated. Attention is also drawn to the relevance of the study and its findings to policy-practice. The final sections in chapter five concede the limitations of the study, but also highlight ways in which researchers can improve on them with a view to strengthening the rigour and relevance of scholarship on SME-friendly procurement. The chapter and the study conclude with a reprise of its key findings and their value in advancing knowledge in the public procurement field.

Fig. 2 Preview of chapters



Chapter 1:

SME-friendly procurement

1.0 Overview of chapter one

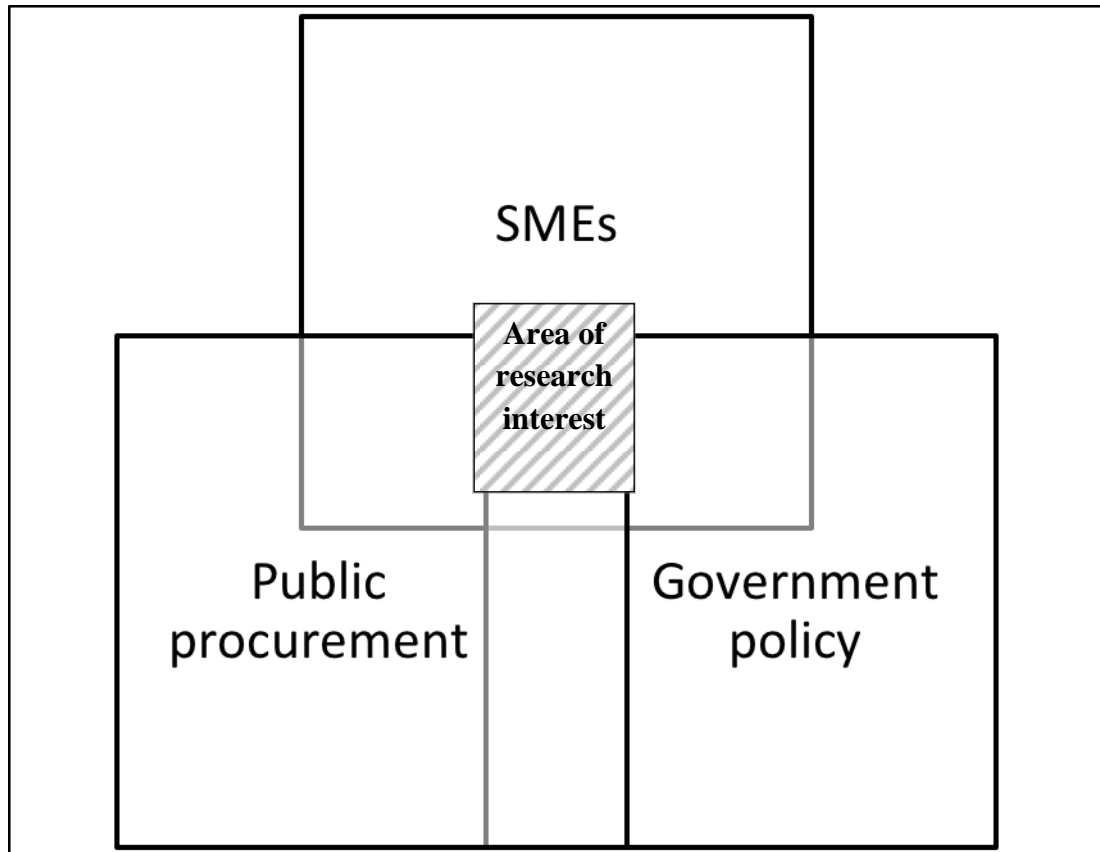
The purpose of a literature review is to summarise what is known on a particular topic and to point out gaps or problems that are deserving of scholarly attention (Hart, 2008; Jesson, Matheson and Lacey, 2011). The literature review for this study examines the existing body of research on SMEs, public procurement and government policy. The intersection of these three areas constitutes the boundaries of the study (see Fig. 3, pg. 19). The gap the literature review identifies is compliance with government policies aimed at making procurement more SME-friendly. The layout of the chapter is as follows. Section 1.1 describes how the literature review process was carried out using both traditional and systematic search methods. Section 1.2 interrogates and defines SMEs, public procurement and government policy. Clarification over how these three concepts are understood and used throughout this study is important as their meanings are not necessarily self-evident or even agreed-on. Section 1.3 then relates the three concepts to each other. It explains why the SME agenda has come to be fused with public procurement and what governments are doing to leverage public procurement for the benefit of SMEs. Having established the connection between SMEs, public procurement and policy section 1.4 goes into greater detail on why public sector contracts are attractive to SMEs. Equally, it makes the case for why having more SME suppliers benefits not only public sector organisations but also national economic competitiveness and societal wellbeing. Going from the positive to the negative, section 1.5 discusses market failure in public procurement. Featured here is SMEs' longstanding frustrations with public sector tendering as well as their disproportionately low participation and success rates in contract competitions. The manifold reasons why SMEs struggle in the marketplace for public sector contracts are documented in

section 1.6. These cover the public sector environment, the peculiarities of the public tendering system, and the resource and capacity limitations inherent to small firms. It is this area more than any other that has garnered most attention in studies on SMEs and public procurement. Government policy initiatives to address these barriers and increase SME participation in public procurement is the subject of discussion in section 1.7. In recent years SME-friendly policies have become a standard feature of the international public procurement landscape. The intent of these policies varies across jurisdictions. In the European Union (EU) the emphasis is on creating a ‘level playing field’ on which all firms can compete while the United States (US) utilises preference schemes for small and ethnic minority-owned firms.

Sections 1.3-1.7 cover what is known at the intersection of SMEs, public procurement and government policy, namely that the agenda to foster a dynamic business environment is increasingly linked to opportunities in the public sector marketplace; that the relationship between SME suppliers and the public sector should be mutually beneficial; that public procurement is characterised by a degree of market failure as far as SME involvement is concerned; that barriers to SME involvement are both external and internal; and that governments have enacted policies to alleviate these barriers. Section 1.8 explores a part of the debate we know relatively little about – compliance with SME-friendly procurement policies. Put simply, it remains to be seen if the much vaunted SME-friendly policies are actually translating into practice. The limited evidence that is available indicates that procurement policies do not always materialise and that policy-practice divides are by no means unusual. Leading on, section 1.9 brings together empirical research and commentary on the factors that explain policy compliance in public procurement. While individual, organisational and environmental-political factors have all been

put forward, and in some cases tested, the area is still under-theorised and under-researched. Identification of these gaps leads the study towards an institutional theory perspective on SME-friendly policy compliance, which is the focus of chapter two.

Fig. 3 Literature boundaries



1.1 Literature review

Literature reviews can be performed in a number of ways. Traditionally, a ‘narrative’ approach predominated in the management science. In more recent years the systematic review processes synonymous with the human sciences has started to gain traction (Tranfield, Denyer and Smart, 2003). A two-stage review process was employed for the purposes of this inquiry, which combined the flexibility of the traditional review technique with the rigour and precision of the systematic method. A traditional scoping review was carried out first and served as the primary means of

sourcing literature. It captured peer-reviewed research and government publications at the intersection of SMEs, public procurement and government policy. Accessing the second of these was crucial as much of what has been written and researched in this area is contained in government or government-sponsored reports and policy documents. A systematic review would not have been capable of sourcing this ‘grey literature’, which is one of its main deficiencies (Curran et al., 2007). Where systematic reviews are strong is in pinpointing relevant content published in scholarly journals (Gough and Elbourne, 2002). On this basis a systematic search of academic databases was carried out after the traditional scoping review. This helped to identify any studies that the initial search missed. The two stages of the literature review are described in more detail below.

1.1.1 Traditional review

In 2012 the research process commenced with a traditional review of literature on SMEs, public procurement and related government policies. Traditional scoping reviews are useful at the start of a major research project where the precise line of inquiry has yet to be determined (Jesson, Matheson and Lacey, 2011). The review was guided by the candidate’s knowledge of the topic at the time² and by the recommendations of the principal supervisor. Mainly, it involved identifying work published by prominent scholars in the public procurement field and scanning article titles in specialist academic journals, including *Journal of Public Procurement*, *Journal of Purchasing and Supply Management* and *Public Procurement Law Review*. Published output on public procurement from national governments, the European Commission and international organisations such as the Organisation for Economic Co-operation and Development (OECD) was also searched. The volume

² The candidate was previously employed as a research assistant on a project concerning public procurement and SME suppliers.

of material grew exponentially as one scholarly article, policy document or government report lead to the identification of contemporaneous or earlier publications. At the completion of the traditional review a substantial body of literature had been amassed. This was added to over the course of 2013-15 as new studies and reports were published and became publicly available.

1.1.2 Systematic review

In addition to the traditional review a systematic literature review was performed. Loader (2013) and Zheng, Walker and Harland (2006) have previously used the systematic review, or a variant thereof, to good effect in compiling existing scholarship on SMEs and public procurement. Here it was used to supplement the traditional review. The strength of a systematic search strategy is its rigour and comprehensiveness when compared to the traditional review approach (Booth, Sutton and Papaioannou, 2012; Cooper, 2010; Fink, 2010; Gough and Elbourne, 2002; Jesson, Matheson and Lacey, 2011). Systematic searching brings a degree of transparency and accountability to the review process that the traditional approach lacks. The systematic review protocol used here entailed searching combinations of keywords relating to SMEs, public procurement and government policy across five different databases (see Table 1). The limiting fields of ‘Title’, ‘Author-Supplied Keywords’ and ‘Abstract’ were used during the search process. The search was confined to Scholarly (Peer Reviewed) Journals. Forty-four articles were sourced in this way. Some of these articles had already been located during the first review phase and some were new. The systematic search thereby acted to strengthen the quality of the review, affirming the results of the traditional review while adding new material. The chapter now proceeds to clarifying what is meant by SMEs, public procurement and policy.

Table 1 Systematic review protocol

SME terminology	Public procurement terminology	Policy terminology	Academic databases
SME	Public procurement	Policy	Business Source
Small firm	Government purchasing		Complete
Small supplier	Government contracts		Academic Search
Small business	Public sector tendering		Complete
Small enterprise	Public sector purchasing		Emerald Insight
			Sage
			Westlaw

1.2 Definition of concepts

Definitional clarity over the concept or concepts in use is critical in any scholarly inquiry (Curran et al., 2007). On the one hand it forces the researcher to think through and then articulate what it is they are investigating. On the other hand it ensures that the reader is clear on how the key concepts are understood and used throughout the study. Three concepts are central to this study: SMEs, public procurement and policy. Definitions for each of these are given in sections 1.2.1-1.2.3. Some concepts are more readily definable than others. This is the situation here. In the EU, as in many other jurisdictions, SMEs are defined in law³. As a result, there is a single and officially approved definition of what constitutes a SME. The same cannot be said of the other two concepts. Public procurement is a relatively new academic field still in search of a unifying, authoritative definition (Prier and McCue, 2009). Similarly, the meaning of policy can vary depending on the context in which it is used (Heclo, 1972). Definitional clarity becomes all the more important in their case.

³ On 6 May 2003 the European Commission adopted Recommendation 2003/361/EC for a definition of SMEs, which replaced Recommendation 96/280/EC.

1.2.1 Defining SME

The SME acronym is part of the everyday language of business and is widely recognised throughout the world (Storey, 1994). Governments in nearly all developed economies define SMEs for policy and legislative purposes. Typically, this is done by reference to the number of full-time employees and one or more measures of revenue or balance sheet total (OECD, 2005). For instance, in the US and Canada any manufacturing and non-exporting firm with less than 500 employees is defined as a SME (United States International Trade Commission, 2010). The same criterion of number of employees is used in the EU, Australia and Japan to define SMEs, albeit with lower thresholds: 250 in the EU, 200 in Australia and 300 in Japan. The exact threshold used by countries or regions to define SMEs generally reflects the profile of their enterprise population and the structure of their economy (OECD, 2005). For the purposes of this study a SME is defined in accordance with EU law. Since January 1st 2005 ***a business entity is classed as an SME if it employs less than 250 persons and has a turnover not exceeding €50,000,000 or a balance sheet total not exceeding €43,000,000*** (European Commission, 2003). As a corollary, any firm that has more than 250 employees and revenues in excess of €50,000,000 is a large enterprise.

The same European Commission definition makes allowance for three SME sub-categories: micro-enterprises, small enterprises and medium enterprises (see Table 2). The reason for this disaggregation is because SMEs comprise over 99 per cent of all firms in the EU. The division of SMEs into sub-categories is based on the criteria of number of employees and revenue or balance sheet total. As the name suggests, micro-enterprises are the smallest SME sub-category in employment and revenue terms. Any firm that employs between 1-9 employees and has revenues not

exceeding €2 million is a micro-enterprise. Above micro-enterprises are small firms. They employ between 10-49 employees and have revenues of between €2-10 million. The biggest SME sub-category is the medium-sized enterprise. They have between 50-249 employees and revenues of between €10-50 million. Throughout the EU micro-enterprises are numerically dominant, making up 92 per cent of the SME population (European Commission, 2009). Small enterprises account for 7 per cent and medium enterprises 1 per cent. The typical SME in Europe is, therefore, a micro-enterprise employing between 1-9 staff and revenues of less than €2 million. Other jurisdictions have their own sub-categories of SMEs and define them by reference to number of employees and financial measures. Further detail on SMEs and their role in the economy is given in section 1.3.1.

Table 2 SME sub-categories in the EU

SME sub-category	No. of employees	Revenue €	Balance sheet total €	% of SME population
Micro enterprise	1-9	< 2 million	< 2 million	92
Small enterprise	10-49	2-10 million	2-10 million	7
Medium enterprise	50-249	10-50 million	10-43 million	1

1.2.2 Defining public procurement

Defining public procurement is more challenging than defining SMEs. For a start, it does not come with the advantage of being articulated in law. There is also a degree of uncertainty over its precise meaning and span of control, something which Prier and McCue (2009) discuss at length. Perhaps this is to be expected given the relative newness of public procurement both as an academic field (Snider and Rendon, 2008; Rendon and Snider, 2010) and as a profession (Matthews, 2005; Prier, McCue and Behara, 2010). The European Commission, national governments, professional bodies and scholars offer their own interpretations and definitions of public

procurement (see Table 3, pg. 28). These are similar to the extent that public procurement is understood to involve public sector organisations acquiring goods and services from external providers. The definition used in this study goes beyond a generic statement of what the procurement process involves. It sees public procurement as *‘the designated legal authority to advise, plan, obtain, deliver, and evaluate a government’s expenditures on goods and services that are used to fulfil stated objectives, obligations, and activities in pursuit of desired policy outcomes’* (National Institute of Government Purchasing, undated; Prier and McCue, 2009:361). There are two main aspects to this definition. The first relates to the activities that comprise the procurement function⁴ in organisations. The second concerns what is unique about procurement in a public sector context. These are dealt with in turn.

As indicated in the above definition, the procurement function is expansive and consists of several activities or stages. These include not only obtaining and receiving delivery of goods and services but also engaging in pre-procurement activities like advising and planning and post-procurement activities like monitoring and evaluation. This stance finds confirmation in the wider literature on supply chain management (see Table 4, pg. 30). Throughout it procurement is understood to extend beyond contract administration to encompass supply market analysis, supplier negotiations, supplier relationship management, information management, collaboration with internal customers and product or service end users, post-contract management (incl. salvage and disposal considerations) and contribution to business goals and overall organisational competitiveness. To illustrate, Carter (1993) lists

⁴ The acquisition of goods and services by public sector organisations is typically referred to as procurement. Outside the public sector acquisition is known by numerous descriptors: purchasing, buying and supply management. These terms tend to be used interchangeably in referring to the acquisition of goods and services (Bowersox, Closs and Cooper, 2002; Monczka et al., 2010).

among the activities that comprise procurement the identification of supply sources, the development of suppliers, negotiating contracts, collaborating with internal customers and managing purchase orders. Likewise, Trim (1994) refers to records maintenance, researching the supply market, developing supply sources, negotiating contracts and overseeing the delivery of goods and services. Van Weele (1995, 2005) sees the remit of procurement activity as stretching from the initial identification of suppliers through to post-contract oversight and evaluation. In sum, procurement is taken to encompass all the activities that are needed to acquire supplies and services as well as their subsequent management (Monczka et al., 2010; Zenz and Thompson, 1994).

The second aspect of the definition emphasises what is distinct about procurement in a public sector context, namely: the role that government plays in determining its practices and guiding its objectives. As the definition states, procurement is ‘used to fulfil stated objectives, obligations, and activities *in pursuit of desired policy outcomes*’ (NIGP, undated; Prier and McCue, 2009:361, emphasis added). While private sector firms exercise discretion over how they purchase goods and services, public sector organisations do not. Instead, they must comply with legally-binding regulations, policies and norms governing their purchasing activity (Murray, 2007; Rainey and Bozeman, 2000; Thai, 2001). These regulations, policies and norms are rooted in the need for accountability and transparency over how public money is spent (Baily, 1978). They are also, as will be discussed in section 1.3.3, increasingly aimed at harnessing public spending for economic, social and environmental policy goals (Arrowsmith, 1995, 2010; Bolton, 2006; Erridge, 2009; Harland, Telgen and Callender, 2013; McCrudden, 2007). The essential point is that public procurement, as with public management generally, is determined by political actors and its ethos

is based on fairness, equality, democracy and the public interest (Boyne, 2002; Murray, 2001a, 2007; Telgen, Harland and Knight, 2007). In contrast, procurement in a private sector context is determined by managerial prerogative and is driven by the overriding goal of profit maximisation.

Table 3 Definitions of public procurement, procurement and purchasing

Author(s)	Definitions of public procurement
National Institute of Governmental Purchasing (undated) ⁵ / Prier and McCue (2009:361)	The designated legal authority to advise, plan, obtain, deliver, and evaluate a government's expenditures on goods and services that are used to fulfil stated objectives, obligations, and activities in pursuit of desired policy outcomes
National Public Procurement Policy Unit ⁶ (2005:4)	Procurement is the acquisition, whether under formal contract or not, of works, supplies and services by public bodies. It ranges from the purchase of routine supplies or services to formal tendering and placing contracts for large infrastructural projects
European Commission (2014a)	Public procurement is the process whereby public authorities – including all levels of government and public agencies – buy goods and services and commission work
Chartered Institute of Procurement and Supply ⁷ (undated1)	Procurement and supply management involves buying the goods and services that enable an organisation to operate
Kidalov and Snider (2011:1)	Public procurement is the means by which government agencies and organizations acquire supplies and services from outside sources
Definitions of procurement	
Van Weele (2005:14)	Procurement relates to the function of purchasing inputs used in the firm's value chain
Monczka et al., (2010:11)	Procurement (or purchasing) refers to all the activities needed to acquire materials
Zenz and Thompson (1994:4)	Procurement is a professional activity that includes all the activities involved in obtaining materials at minimum cost, transporting them, storing them, and moving them toward the production process
Bowersox, Closs and Cooper (2002:45)	Procurement is concerned with purchasing and arranging inbound movement of materials, parts and/or finished inventory from suppliers to manufacturing or assembly plants, warehouses or retail stores
Definitions of purchasing	

⁵ The National Institute of Governmental Purchasing (NIGP) represents public procurement professionals in the US and Canada.

⁶ The National Public Procurement Policy Unit (NPPPU) was subsumed into the Office of Government Procurement (OGP), Ireland in 2013.

⁷ The Chartered Institute of Procurement and Supply (CIPS) is an international body representing purchasing and supply professionals.

Baily (1978:1)	Organizational purchasing is the process by which organizations define their needs for goods and services, identify and compare suppliers and supplies available to them, negotiate with sources of supply or in some way arrive at agreed terms of trading, make contracts and place orders, and finally receive the goods and services and pay for them
Van Weele (2005:14)	Purchasing is defined as obtaining from external sources all goods and services which are necessary for running, maintaining and managing the company's primary and support activities at the most favourable conditions
Lysons (1993:1)	Organizational purchasing may be defined as that function responsible for obtaining by purchase, lease or other legal means, equipment, materials, supplies and services required by an undertaking for use in production
Carter (1993:3)	Purchasing refers to the activities required for obtaining the material resources and services that are needed by the manufacturing system
Gadde and Hakansson (1993:13)	Purchasing comprises a company's behaviour in relation to its suppliers

Table 4 Remit of procurement

Author(s)	Activities that comprise procurement
Heywood, Heywood and Barton (2002); Barrat (2004)	Developing supplier relationships; developing, negotiating and maintain supplier contracts; servicing requests for quotations; composing and placing purchase orders; expediting deliveries; identifying alternative sources of supply
Van Weele (1995, 2005)	Determining the required quality and quantity of goods and services that need to be bought; selecting suppliers; negotiating with suppliers; placing orders; monitoring orders (incl. expediting orders); post-contract management
Saunders (1994) and Lysons (1993)	Contribute to formulation, communication and implementation of policies and strategies; contribute to establishment of purchasing supply systems; create and maintain a database of purchasing and supply information; establish and improve sources of supply; acquire suppliers; provide goods and services to internal and external customers; monitor and control supply chain; contribute to effective working
Carter (1993)	Identifying and selecting supply sources; developing suppliers; negotiating contracts; developing quality specifications; working with process engineering and product development; maintaining corporate material database; releasing purchase orders; tracking orders; paying for goods; strategic planning
Trim (1994)	Maintaining records on prices, purchases, stock, supplies and catalogues; researching the supply marketplace; investigating supply sources; developing supply sources; managing requisitions for goods and services; securing and analysing quotations; scheduling deliveries; negotiating contracts; issuing purchase orders; checking receipt of materials; maintaining stocks
Erridge (1995)	Supply market analysis; vendor appraisal; supply-base optimisation; improving supplier performance; establishing and evaluation of supply requirements; supplier selection; and contracting
Monczka et al., (2010)	Evaluating and selecting suppliers; acting as a primary contact point with suppliers; deciding how to make a purchase; reviewing goods and services purchased
Dobler, Burt and Lee (1990)	Participation in the development of requirements and their specifications; managing value analysis; researching supply market; managing supplier negotiations; buying; administering purchase contracts; managing supplier quality
National Institute of Governmental Purchasing (undated)	Includes all functions that pertain to the acquisition, including description of requirements, selection and solicitation of sources, preparation and award of contract, and all phases of contract administration; also includes the combined functions of purchasing, inventory control, traffic and transportation, receiving, inspection, storekeeping, salvage and disposal operations

1.2.3 Defining policy

As with public procurement, there is no singular or agreed-on definition of policy. Depending on the context in which it is used policy can denote a broad orientation e.g. ‘we have a policy of openness in this organisation’; an indication of standard practice e.g. ‘we recruit from within the local community’; a specific commitment on the part of government e.g. ‘we will create 100,000 new jobs by a given date’; or a descriptive label e.g. ‘economic policy’ (Colebatch, 2002; Hogwood and Gunn, 1984). In this study policy is understood in the context of government behaviours and intentions – also known as public policy - and is defined succinctly as ***‘a course of action intended to accomplish some end’*** (Heclo, 1972:84). The fact that policy is a ‘course of action’ is suggestive of it being a continuous process involving multiple actors, including the individuals responsible for implementing it (Hill, 1997; Hogwood and Gunn, 1984; Howlett and Ramesh, 1995). Furthermore, this ‘course of action’ imposes order to the extent that it prescribes how public officials should behave, is based on the legitimate authority of the state, and implies a degree of expertise on the part of those who formulate it (Colebatch, 2002). The emphasis in this study is on policies to facilitate greater SME participation in public contract competitions. The chapter now moves to discussing why these policies have come about.

1.3 The SME-public procurement nexus

SMEs and public procurement are increasingly spoken of in the same context. The myriad advantages of having more SMEs participate in the public sector marketplace feature regularly in political discourse. So too do the initiatives promised to make this more of a reality. These developments have worked their way into the academic domain so that issues surrounding SME involvement in public procurement constitutes a burgeoning line of inquiry (Loader, 2010, 2013). Addressing the

question of why exactly this inter-relationship has come about is the focus of this section. Its point of departure is the centrality of SMEs to the modern economy. SMEs' contribution to employment generation, innovative activity and economic growth is indisputable. As an enterprise cohort they are frequently referred to as the engine of the modern economy⁸. Their economic importance has crossed into the public policy arena, and this is discussed in section 1.3.2. Nation states and regions are becoming more proactive in seeking to maximise the economic potential of small firms. Proof of this, the guiding principle of EU enterprise policy is to 'think small first' (European Commission, 2008a). The same principle has come to influence how elected representatives and policy makers think about and frame public procurement. Traditionally a challenging environment for SMEs, significant efforts have been made in recent years to reverse this situation and harness the financial weight of public procurement so as to benefit the SME sector and spur economic competitiveness. Section 1.3.3 goes into more detail on public procurement's potential in this regard.

1.3.1 SMEs and economic competitiveness

It is, as Storey (1994:253) has argued, 'no longer possible to discuss economic policy without recognising the role which small firms play in the economy and in the rest of society more generally'. Beaver and Prince (2004) reiterate this view in asserting that SMEs' interests cannot be ignored when it comes to drafting public policy. The predominance of the SME firm type as well as their contribution to gross value added (GVA), employment and innovation make SMEs critical to economic growth. As a result, governments have become more sensitive to the needs of SMEs and appreciative of how the resources of the state can be deployed to support their

⁸ This phrase is widely used in government policy. For example, the Glover Report (2008) on public procurement and SMEs in the UK is entitled: *Accelerating the SME Economic Engine through Transparent, Simple and Strategic Procurement*.

competitiveness. SMEs account for over 99 per cent of enterprises in the world's major economic zones (see Table 5). In actual figures, this translates into 21.6 million SMEs in the EU (European Commission, 2013, 2014b), 22.7 million in the US (Small Business Administration, 2012), 1.11 million in Canada (Industry Canada, 2013) and 2.09 million in Australia (Australian Government, 2012). The GVA attributed to SMEs is also sizeable across these same countries and regions. In Canada and the US it is 39 per cent and 44 per cent respectively. In Australia and the EU the comparable figures are higher at 57 per cent and 58 per cent respectively.

SMEs and employment are invariably linked together by economic commentators. The data in Table 5 shows why. SMEs are responsible for employing the majority of the workforce in the EU, Canada, Australia and Japan. Two out of every three European workers are employed in a SME and nine out of ten Canadian workers are SME employees. Only in the US does the SME enterprise cohort not account for a majority of workers, and then only by a small margin. Among the main economic strengths of SMEs is their ability to generate employment. In the EU SMEs were responsible for creating 85 per cent of new jobs between 2002 and 2010, which was significantly above their 67 per cent share of total employment (EIM Business & Policy Research, 2011). The employment growth rate for SMEs over the same period was 1 per cent per annum as compared to 0.5 per cent for large enterprises. SMEs are also at the forefront of innovative and entrepreneurial activity. Evidence from the US has SMEs outperforming large firms on measures such as patent-to-employee ratio (Small Business Administration, 2008). At the macro level, the experience of most countries is supportive of the hypothesis that higher rates of new enterprise creation and entrepreneurial activity correlate with higher rates of economic growth (Carree

and Thurik, 2003; Ovaska, 2014). On these and other dimensions SMEs are critical to economic competitiveness and national wellbeing.

Table 5 SMEs in the enterprise population

	SME definition (No. of employees)	SME %	SME number (million)	Employment share %	Value added %
EU	< 250	99.8	21.6	67	58
US	< 500	99.9	22.7	48.5	44.5
Canada	< 500	99.9	1.11	89.9	39
Australia	< 200	99.8	2.09	70	57.1
Japan ⁹	Varies by sector. Max. 300	99.7	n/a	69	53

In the decade leading to 2007 SMEs acted as the engine of employment growth and increased their contribution to GVA. Thereafter, SMEs, particularly in the EU and the US, were buffeted by the international financial crisis and its repercussions in the form of reduced customer demand, difficulty in accessing finance, late payment, bad debts and depressed economic trading conditions (Kitching et al., 2009). Post the financial crisis employment in European SMEs decreased at an annual rate of 2.4 per cent compared to 1 per cent in large firms (EIM Business & Policy Research, 2011). To contextualise the effects of the financial crisis, between 2007 and 2010 Irish SMEs' contribution to GVA fell from 53 per cent to 48 per cent, employment dropped by 15 per cent and final output fell by 18 per cent (European Commission, 2011a). As of 2014, SMEs in 15 EU Member States still had not returned to their pre-crisis employment or final output levels (European Commission, 2014b). Data from the US paints a similar picture. There SMEs' share of GDP went from 46 per cent in 2009 to 44.5 per cent in 2010 and, when compared to large corporations, their recovery has been slow (Small Business Administration, 2012). Evidently, SMEs are more vulnerable during and immediately after periods of financial crisis than large

⁹ Economist Intelligence Unit (2010).

enterprises. Appreciation of this point has prompted governments to redouble their efforts to assist small firms through both supply and demand-side interventions.

1.3.2 Government policy and SMEs

Historically, SMEs carried little weight in public policy making and were assumed to have only a limited contribution to make to economic growth and competitiveness (Bannock and Peacock, 1989; Storey, 1994). The last number of decades has witnessed a reversal of this position. Reflective of their economic importance, SMEs and the entrepreneurial individuals that create them are now central to policy making (Williams, 2013). The *Small Business Act* envisages SMEs as ‘decisive for the future prosperity of the EU’, enunciating ten principles designed to maximise their economic contribution (European Commission, 2008a:2). So does the *Europe 2020 Strategy*, which includes among its flagship initiatives an ‘industrial policy for the globalisation era’ that is SME-centred (European Commission, 2010a:6). Federal policy in the US, latterly in the form of the *Small Business Act 2013*, recognises SMEs as critical for maintaining a competitive enterprise environment, underpinning economic wellbeing and contributing to national security (Small Business Administration, 2013). Since adopting the *Bologna Charter on SME Policies* the OECD has also championed SME competitiveness in its policy advice (OECD, 2000). Similar policy trajectories can be discerned at national level, such as the Britain’s *Small Business: GREAT Ambition* strategy for fostering SME growth (HM Government, 2013) and Ireland’s *National Policy Statement on Entrepreneurship* (Department of Jobs, Enterprise and Innovation, 2014).

The above policies exemplify how governments and supranational entities seek to enable and empower small enterprises. Carree and Thurik (2003) contend that this marks a paradigm shift in the relationship between state and enterprise. Whereas

once policy was designed to constrain the power of large firms, the emphasis in the current era is on unleashing the entrepreneurial potential of small firms. As the same authors assert, this is because the comparative advantage of developed economies depends on knowledge-intensive firms that are capable of competing at international level. Government proactivity in supporting SMEs connotes that their number, employment share and economic contribution are socially suboptimal (Lundstrom et al., 2014). This situation is attributed to market imperfections particular to SMEs, including: higher costs of compliance for them in the marketplace and information asymmetries among putative entrepreneurs as to the benefits of business ownership (Storey, 1994, 2003). Policy support for SMEs is designed to correct these market imperfections and ensure that their full potential is realised (Aram and Coomes, 1985; Bannock and Peacock, 1989; Ovaska, 2014). By creating conditions conducive to new venture creation, the expectation is that the labour force will benefit from employment creation, the marketplace will enjoy greater competition, and other positive externalities and spill-over effects associated with a dynamic economic environment will accrue to society. It is these social returns from having more and better small firms that serves as the rationale for policy support measures.

The interventions that governments use to support SMEs assume a number of forms. Among these Bennett (2008:375) identifies increasing the rate of business start-ups; improving the survival or growth rates of existing firms; improving the general business environment for all firms; and reducing the burdens, regulations and compliance costs for SMEs. Common policy foci are evident across jurisdictions. EU policy includes improving access to finance, export support, education and training in entrepreneurship, intellectual property and encouraging investment in research and development (R&D) as areas through which it can strengthen SMEs

(European Commission, 2008b). Access to finance, simplifying employment law, intellectual property management and commercialisation, export support, business advice and a less regulated environment are also priorities in British and Irish enterprise policy (Department of Jobs, Enterprise and Innovation, 2014; HM Government, 2013; Small Business Forum, 2006). In the US the Small Business Administration aims to assist SMEs by, inter alia, augmenting their ability to export, facilitating technology transfers and increasing access to capital (Small Business Administration, 2013). As well as high-level actions, more targeted policy interventions are also popular. These focus on niche SME cohorts such as high potential start-ups (Smallbone, Baldock and Burgess, 2002) and ethnic minority-owned businesses (Ram and Smallbone, 2003; Worthington et al., 2008). In the aftermath of the 2007 financial crisis a public policy domain which has moved centre stage in the SME debate is public procurement. It is to this nexus of SMEs and public procurement that the chapter now turns.

1.3.3 Public procurement, government policy and SMEs

Policies and strategies for the promotion of SMEs now encompass public procurement as a matter of course. The EU's *Small Business Act* lists access to public sector contracts as one of its ten priority areas (European Commission, 2008a). National enterprise policies and action plans in Ireland and the United Kingdom (UK) envisage the market for public sector contracts as pivotal to providing growth opportunities for small and newly established firms (Advisory Group for Small Business, 2011; HM Government, 2013). To understand why the SME agenda has come to be interleaved with public procurement it is necessary to take a closer look at the latter. The first and most salient point is that public procurement constitutes a significant part of the macro-economy. It approximates to

16 per cent of EU GDP (European Commission, 2008a) and 12.8 per cent of GDP and 29 per cent of total government expenditure, on average, across OECD countries (OECD, 2013). In monetary terms this translates into €16 billion in Ireland, £230 billion in the UK and €1.7 trillion across the EU. These are substantial figures and make government and its estate the single largest purchaser in most economies. The situation is replicated at the sub-national level where the procurement budgets of public sector organisations constitute a sizeable part of local and regional economies and make them among the principal commercial actors (Cabras, 2011; Walker and Brammer, 2009).

The second point is that public procurement is under the control of governments and, within legal and regulatory limits, can be harnessed by them to give effect to socio-economic policy goals (Harland, Telgen and Callender, 2013; Snider and Rendon, 2008; Thai, 2001). The definition of public procurement operative in this study explicitly recognises this to be so. There is a long history of governments bringing the financial weight of public procurement to bear on political objectives, as documented by McCrudden (2007). This situation has continued up to the present day as part of a more overarching trend for ‘joined-up policy’ (Christensen and Laegreid, 2007; Downe and Martin, 2006) and a more strategic role for procurement in the public sector (Quayle, 1998; Quayle and Quayle, 2000). The award of public sector contracts has been variously linked to labour standards (Howe and Landau, 2009), training provision (Austen and Seymour, 2009), redressing discriminatory commercial and employment practices (Bolton, 2006), corporate social responsibility (Baden, Harwood and Woodward, 2011; Murray, 2000; Snider et al., 2013) and economic protectionism (Kono and Rickard, 2014). The EU has been especially proactive in attempting to leverage public procurement for political ends. Since 2008

it has issued procurement guidelines for social cohesion and ethical sourcing (European Commission, 2010b), environmental protection (European Commission, 2011b) and SME inclusion (European Commission, 2008c). These policies have percolated down to EU Member States. Ireland, for example, recently adopted *An Action Plan on Green Public Procurement* (Department of Environment, Community & Local Government, 2012) and a guide to *Buying Innovation* (Department of Enterprise, Trade & Employment, 2009).

As a policy lever public procurement has particular valency for stimulating business growth and entrepreneurship (Preuss, 2011). Complementing initiatives by governments to increase the supply of small firms, public procurement constitutes an important demand-side stimulant, although its potential in this regard has yet to be fully exploited (Edler and Georghiou, 2007). In concrete terms public sector contracts represent opportunities for small and newly created firms to develop their customer base, gain market share, grow and professionalise (see section 1.4.1). Because of these possibilities public procurement is seen as integral to improving the survival and growth rates of SMEs across developed and developing economies (Harland, Telgen and Callender, 2013; Reis and Cabral, 2015). Higher rates of SME involvement in public procurement should, in theory at least, contribute to a more dynamic and competitive economy. Twenty-five years ago the European Commission (1990:13) acknowledged this link, stating that ‘failure to achieve the best possible participation of SMEs in public procurement reduces the dynamism of the internal market at the same time as holding back regional economic development’. In the intervening years achieving the best possible participation of SMEs in public procurement has proved arduous in the EU and the US (Kidalov and Snider, 2011, 2013). Recent SME-friendly policies aim to succeed where previous

initiatives have fallen short by delivering real and lasting reform of public procurement.

1.4 The case for SME involvement in public procurement

A consensus runs through political and academic thinking that increased SME involvement in public procurement is desirable. Elected representatives talk of ‘promoting’, ‘facilitating’ and ‘involving’ small firms in the marketplace. The same sentiment permeates scholarly research where efforts are directed at identifying the barriers that inhibit SME participation and then proposing solutions to tackle them (Loader, 2013). Concurrently, scholars are starting to explore the types of behaviours, strategic orientations and market positioning strategies that lead to SME success in contract competitions (Reijonen, Tammi and Saastamoinen, 2014; Tammi, Saastamoinen and Reijonen, 2014). The previous section explained why the agenda for SME competitiveness has come to be entwined with public procurement. Now this section will take a more fine-grained look at the relationship between the two. Section 1.4.1 explains that public sector contracts represent a stable source of business demand for SMEs; one that comes with the advantage of guaranteed payment and reputational enhancement. Section 1.4.2 inverts this point by showing how SME suppliers are valuable to the public sector and that the latter has a vested interest in ensuring more SMEs compete for their business. Leading on, sections 1.4.3-1.4.4 set out the economic and social dividends of SMEs acting as suppliers to public sector organisations.

1.4.1 Value of public sector contracts to SMEs

Public sector contracts benefit SMEs in multiple ways, both tangible and intangible. Firstly, public sector contracts offer stable and predictable sources of demand (Bovis, 1996; Erridge, 1998; Fee, Erridge and Hennigan, 2002; Pickernell et al.,

2011). Stability and predictability afford SMEs a degree of security to plan for the future, invest in new technology or capital equipment and hire new staff. The reported views of SMEs bear this out. Studies by Loader (2005) and Peck and Cabras (2010) on UK SMEs and MacManus (1991) on US SMEs found that long-term business opportunities, contract security and revenue stability were among the main attractions of public sector contracts. Secondly, public sector contracts are associated with payment certainty. This factor was cited by over 80 per cent of SMEs surveyed by Loader (2005) as an advantage of supplying to the public sector. It also emerged as the number one reason why firms in the US were motivated to act as suppliers to the public sector (MacManus, 1991). The frequency with which contracts are issued in the public sector also tends to be higher than in the private sector, which injects fluidity into the market for contracts and opens up more opportunities for small and new suppliers (Bovis, 1996).

Besides predictable sources of demand and guaranteed payment, public sector contracts appeal to SMEs in other less tangible ways. Acting as preferred supplier to a public sector organisation can burnish the credentials and marketplace reputation of a SME (Erridge, 1998). In turn, this can strengthen their position when tendering for future contracts in either the public or private sector. Notably, a demonstrable record of success is identified by SMEs themselves as a prerequisite to win business with public sector organisations (Withey, 2011). Public sector contracts also represent a means for SMEs to diversify their customer base and avoid over-dependence on private sector business, which is more cyclical than public sector demand (Bovis, 1996). In a similar way, public contracting allows small firms, particularly ethnic-owned firms, to graduate from low value market niches to the mainstream commercial environment (Ram and Smallbone, 2003). Public

procurement also acts as a demand-side stimulant to SME innovativeness and, at a level up from this, industrial development (Edler and Georghiou, 2007; Procurement Innovation Group, 2009; Rothwell, 1984). Procurement competitions can trigger innovation by preferring the most technologically-sophisticated products or encouraging firms to develop new service solutions (Georghiou et al., 2014). The same authors found that 67 per cent of the 800 SMEs they surveyed agreed that public procurement competitions act as an impetus to their innovative activity.

1.4.2 Value of SME suppliers to public sector organisations

It is not only SMEs that stand to benefit from supplying the public sector. The public sector and, by implication, the delivery of public services also have much to gain from contracting with SMEs (BIP Solutions, 2009; Office of Government Commerce, 2003). At the most basic level SMEs have the capability to meet the supply needs of public sector organisations, even in technologically demanding and sensitive sectors such as defence acquisition (Kidalov, 2015). SMEs are also well placed to offer competitive pricing arrangements on account of their minimal administrative overheads and streamlined operations. Aside from the possibility of competitive bid pricing, having SMEs compete for public sector contracts stimulates competition and can help attenuate the market power of large, established suppliers. Their presence also broadens the supply base from which public buyers can choose and gives public buyers more market power (European Commission, 1990). Enhanced choice has been cited by purchasing organisations as justification for accommodating more SMEs in their supply chains (Ram and Smallbone, 2003). Ensuring SMEs have the opportunity to compete for business is, in the final analysis, part of public buyers astutely managing their supply base, something which Caldwell et al., (2005) have argued is critical to more effective and strategic procurement.

Entrepreneurship, niche skills, versatility and customer responsiveness are attributes frequently invoked when promoting SMEs as suppliers (BIP Solutions, 2009; Office of Government Commerce, 2003). Public buyers have acknowledged these attributes as among the main attractions to doing business with SMEs (Loader, 2007; Smith and Hobbs, 2001). In terms of entrepreneurial ability, SMEs' ability to recognise opportunities and leverage their capabilities to create innovative products and services makes them preferred suppliers for many large public and private sector organisations (Woldesenbat, Ram and Jones, 2011). Compared to large organisations, SMEs' flat structures and short chains of command make it possible for them to respond quickly to market changes and customer requirements (Office of Government Commerce, 2003). Coupled with responsiveness is the oft heard compliment that SME suppliers are willing 'to go the extra mile' in service standards and customer commitment (NERA Economic Consulting, 2005). Another advantage from a public sector perspective relates to sustainability targets. As demonstrated across several studies, using locally-based SME suppliers in, for example, catering and food provisions reduces an organisation's carbon footprint (Morgan, 2008; Nijaki and Worrell, 2012; Walker and Preuss, 2008). Moreover, contracting with SMEs is consistent with the mandate of public sector organisations, particularly local authorities, to contribute to the economic, social and environmental development of the local community (Murray, 1999, 2000, 2001b; Preuss, 2009). Like SMEs, public sector organisations stand to gain in both tangible and intangible ways from the relationship.

1.4.3 Value of SME suppliers to economic competitiveness

The benefits of contracting with SME suppliers accrue not only to public sector organisations but also to the exchequer and to the wider economy. In the first

instance, SME involvement adds to both the quantity and quality of competition, which can lead to lower bid prices and a more efficient public procurement market (EIM Business & Policy Research, 2004; European Commission, 1990; Glover, 2008). Supportive of this position, econometric analysis indicates that more openness and transparency in the public procurement system is associated with an increased numbers of bidders and better price/quality ratios (Europe Economics, 2004, 2011). The obverse also holds true – SMEs' exclusion leads to a diminution in competition (Kidalov, 2015). Positive externalities in the form of employment creation and contributions to economic growth are also predicted to result from increased SME participation in public procurement markets (Erridge, 1998; Fee, Erridge and Hennigan, 2002; O'Brien, 1993). These are particularly welcome in regions that are comparatively disadvantaged and that have low levels of private sector investment (European Commission, 1989). Greater commercialisation of innovative products and services is another positive externality that results from having more entrepreneurial start-ups serving as public sector suppliers (Procurement Innovation Group, 2009; Uyerra and Flanagan, 2010). The innovative base of the economy is strengthened as a result.

1.4.4 Value of SME suppliers to societal wellbeing

The value to society from SME involvement in public procurement flows from their economic contribution. SME inclusion underpins the economic, social and environmental sustainability of urban centres and regions. Relevant here is the known propensity of locally-based SMEs to re-invest public sector revenues back into the community, producing a local multiplier effect (Cabras, 2011; Nijaki and Worrel, 2012; Preuss, 2011). SMEs, unlike multi-national corporations, will not be domiciled overseas for tax liability purposes nor will they typically repatriate profits

to an overseas headquarters. Consequently, revenue from public sector contracts awarded to SMEs is more likely to be recirculated in the local economy. From the perspective of the buyer, awarding contracts to local SMEs helps return revenue to the local authority or government department through business taxes and rates. In the medium-long term it can even reduce expenditure on social protection programmes by virtue of lower unemployment and greater economic activity (Walker and Preuss, 2008; Preuss, 2011). Social cohesion is also supported when public sector organisations contract with atypical SMEs i.e. firms owned or managed by foreign nationals, women or disabled individuals (Michaelis, McGuire and Ferguson, 2003; Smallbone et al., 2008; Worthington et al., 2008). SME innovativeness can also produce a social dividend when it leads to innovative products and services that improve public service delivery (European Commission, 2014a; Uyarra and Flanagan, 2010).

1.5 Market failure in public procurement

Mutually beneficial though it may be for SMEs and public sector organisations to interact, the reality of everyday procurement practice paints a less sanguine picture of events. The very fact that SME-friendly policies exist in the first place signifies that the marketplace is not functioning optimally and is marked by a degree of failure. Commenting on recent SME-friendly initiatives in the UK Loader (2013:39) made the contention that ‘they reinforce the concern that public procurement is not supporting small business as effectively as both the government and small business would like’. Kidalov and Snider (2011) arrived at the same conclusion, reasoning that there would be no need for the on-going roll out of SME-friendly support measures if the public sector market was efficient and competitive. The purpose of this section is to present evidence of market failure in public procurement. As a lead-

in, section 1.5.1 synopsis SMEs' perceptions and experiences of public sector tendering. On the whole SMEs are cynical and view the system as dysfunctional. Section 1.5.2 reports what data there is on SMEs' participation and activity in public procurement. Building on this, SMEs' success rates in the EU marketplace and in the British and Irish marketplaces are examined in sections 1.5.3-1.5.4 respectively. The figures put the number and value of contracts won by SMEs well below their weight in the economy.

1.5.1 SMEs' perceptions of public procurement

The positive sentiments expressed by SMEs over supplying public sector organisations belie their reported frustration and dissatisfaction with public procurement. In a 2010 survey of its members the Irish Business & Employers' Confederation (2010) found that 56 per cent viewed the public sector tendering system as poor. In a larger study involving over 3000 firms in the US less than one in three respondents agreed that public procurement practices were either 'competitive, efficient, or equitable' (MacManus, 1991). Even with the launch of initiatives designed to assist SMEs in tendering, negative sentiments persist. Forty-three per cent of Irish suppliers surveyed in December, 2011 complained that public procurement had become less business-friendly over the preceding three years and a further 37 per cent believed that there had been no improvement (Flynn et al., 2013). Evidence has also been adduced in British and Australian contexts to show that SMEs' perceive the value proposition of supplying the public sector to be lower than the private sector on such criteria as profitability, sales volume, market access and even contract stability (BIP Solutions, 2009; Purchase, Goh and Dooley, 2009). Relatedly, SMEs see private sector buyers to be more open to innovation (Georghiou et al., 2014). Commercially attractive as public sector contracts may be, SMEs are

highly critical of how public procurement operates in practice and believe it to be something of a double-edged sword.

1.5.2 SME participation in public procurement

Perceptions aside, SMEs' tendering activity offers an objective measure of the inclusivity of public procurement. The available data points to relatively low levels of SME tendering activity as well as the absence of a sizeable cohort of SMEs from the marketplace. In a baseline study by Flynn et al., (2013) 51 per cent of firms actively competing for business with the Irish public sector were micro-enterprises, well below their 90 per cent presence in the enterprise population. In contrast, 11 per cent of competing firms were classified as large, even though they number less than 1 per cent of the enterprise population. MacManus's (1991) survey of public procurement in the US also reported the under-representation of sole proprietorships and the over-representation of corporations relative to their respective numbers in the population. In a 2012 survey of almost 5000 UK SMEs only 10 per cent had bid for a public sector contract in the previous 12 months, although 26 per cent had worked directly or indirectly for public sector organisations over the same period (BMG Research, 2013). The proportion of small firms¹⁰ in the UK using the internet to either access public sector tender documents or sell to public sector organisations in 2011 was half that of large firms: 19.5 per cent versus 38.5 per cent (Office for National Statistics, 2012). Altogether, SMEs are shown to be under-represented as competitors in the public sector marketplace.

¹⁰ Employing fewer than 50 workers.

1.5.3 SME success rates: EU

Another indicator of market failure is SMEs' success rates. For above-threshold contracts¹¹ in the EU analyses shows that SMEs under-perform relative to their actual number and GDP contribution. Between 2006 and 2008 SMEs won 60 per cent of above-threshold contracts as against their 99.8 per cent presence in the enterprise population (GHK, 2010). This equated to 33 per cent of the total value of above-threshold contracts, which is some 20 per cent lower than their GDP contribution. Based on determinations made in earlier reports (EIM Business and Policy Research, 2004; GHK and Technopolis, 2007), SMEs' performance has deteriorated in recent years (see Table 6). The gap becomes even more pronounced when SME sub-categories are examined. Micro-enterprises, which comprise nine out of ten firms, only secured 18 per cent of all above-threshold contracts and 6 per cent of the total value between 2006 and 2008. Medium-sized enterprises, which make up only 1 per cent of SMEs, won 20 per cent of all above-threshold contracts and 17 per cent of the total value over the same time period. These findings are backed-up by evidence from elsewhere, which demonstrates that firm size is a predictor of participation and success in public sector tendering (Flynn, McKevitt and Davis, 2015a; Pickernell et al., 2011).

Table 6 SMEs' share of public procurement in the EU

Year	% of contacts won by SMEs	SMEs' presence in EU economy %	Value of contracts won by SMEs %	Value of SMEs' GDP contribution %
2001	53-78	99.8	43	53
2005	64	99.8	42	56
2006-2008	60	99.8	33	56

¹¹ Public sector authorities throughout the EU are legally obliged to publish contracts valued above certain financial thresholds in the *Official Journal of the European Union (OJEU)*. These above-threshold contracts account for approximately 16 per cent of public procurement expenditure across the EU.

1.5.4 SME success rates: Ireland and UK

National statistics also point to SMEs winning a disproportionately low share of public sector contracts. Twenty years ago small firms in the UK and Ireland were estimated to have a 15 per cent share of their respective markets (Bovis, 1996). Around the same time Greer (1999) put Irish-based SMEs' share of the domestic public procurement market at 11.5 per cent. Extrapolating from a sample of three government departments Michaelis, McGuire and Ferguson (2003) surmised that small firms made up 71 per cent of suppliers and 30 per cent of the total value of procurement spend in the UK. In the same study the corresponding percentages for female and ethnically-owned firms were significantly lower. In 2005 NERA Economic Consulting (2005) put British SMEs' share of their domestic public procurement market at 5 per cent, albeit with substantial variation across government departments. By 2010 the official figure circulated by the British government was 6.5 per cent or £3.11 billion, not including indirect procurement spend with SMEs through sub-contracting (Cabinet Office, 2011). The most recent data, which covers the period 2012-2013, calculated that 10.5 per cent of direct spend and 9.4 per cent of indirect spend was going to British SMEs (Cabinet Office, 2013). Whether in respect of their tendering activity or success rates, the available evidence leaves little doubt that SMEs struggle with public procurement.

1.6 Reasons for market failure in public procurement

Why small firms are under-represented in public procurement has been the subject of extensive investigation. Arguably, it is this topic more than any other that has come to define research on SMEs and public procurement (Loader, 2013). Reviewing studies undertaken to date, the same author delineated three categories of barriers that militate against SME involvement in the marketplace for public sector contracts: the public sector environment; the tendering system; and SMEs' own resource

limitations. These are dealt with in turn in the sections below. The focus in section 1.6.1 is on issues within the public sector environment, including: contradictory policy goals, low levels of professionalism and a risk-averse culture. Section 1.6.2 examines problems associated with the tendering process. It is on this topic that SMEs have been most voluble. Interestingly, the same complaints and experienced difficulties have surfaced in different jurisdictions and have persisted over time. Barriers affecting SMEs are not only found in the external environment, and so section 1.6.3 looks at the organisational and resource limitations inherent to small firms and how these impact their ability to compete for and win public sector contracts.

1.6.1 Barriers in the public sector environment

Many of the causes of SMEs' experienced difficulties in public procurement emanate from within the public sector environment. There are several strands to this argument. Firstly, public procurement is criticised for the inconsistency and even incompatibility of its goals and policies (see section 1.9.2). Among the effects of such 'regularity ambiguity' (Morgan, 2008) is that public buyers are left confused over their priorities. This is said to have repercussions for facilitating SMEs when set against obligations to maximise value for money and adhere to national and international procurement laws. Public procurement is also attacked for its lack of professionalism. Some years back Greer (1999) observed that staff in many Irish public sector organisations did not possess the requisite purchasing skills, qualifications and experience. In an international context, half of OECD countries are said to lack adequate procurement capability as measured by the number of public buyers and their levels of professional expertise (OECD, 2013). Inadequate technical and market knowledge among public buyers has also been cited as

problematic by SMEs, particularly when it comes to selling innovative goods and services (Erridge, Fee and McIlroy, 1999; Georghiou et al., 2014). Professionalism among public buyers is, according to one report, the ‘primary instrument for achieving a better use of smaller firms in public procurement’ (NERA Economic Consulting, 2005 vii).

Allied to concerns over professionalism is the long-held belief that a culture of risk aversion permeates public sector procurement. The Procurement Innovation Group (2009) linked risk aversion on the part of public buyers to a failure to exploit novel and innovative products and services. The reported experiences of SMEs add further weight to this belief. In Loader’s (2005) study SMEs complained of inertia, risk aversion and a reluctance to deviate from tried and tested products and practices among public buyers. The effect of risk aversion, as indicated by Walker and Preuss (2008) and Loader (2014) is that larger and better-known suppliers are preferred to smaller, newer suppliers. Findings by Pickernell et al., (2013) that young firms are less able to access public procurement opportunities at either local or national level appear to bear this out. The final point on the public sector environment relates to the structural configuration of procurement. It is not uncommon for public sector organisations to have no designated procurement unit or even procurement officer (Thai, 2001). That procurement often lacks a clear organisation identity and/or position in the organisation hierarchy has implications for the consistency and effectiveness of everyday purchasing practices. In particular, ‘if public procurement is being performed by people other than procurement officials, the chain of command is diluted and the public policy process will be adversely affected’ (Prier and McCue, 2009:361). Policies to promote SME participation in contract competitions are not exempt from this issue.

1.6.2. Barriers in the tendering process

At a level beneath the public sector environment are problems specific to the public tendering system. The literature is replete with evidence on the procedural hurdles that stymie SMEs. Identifying contract competitions is the first obstacle to negotiate and small firms often struggle even at this initial stage (Greer, 1999; Loader, 2005; Ringwald et al., 2009). The e-advertising of contracts is helping to offset this problem to an extent. As of 2010 approximately 60 per cent of small firms throughout the EU were using the internet to interact with public sector organisations (Eurostat, 2015a), although only 13 per cent had submitted a tender online (Eurostat, 2015b). In some countries dedicated national e-procurement portals exist, which allows prospective suppliers to search for contracts. Other countries have yet to institute such arrangements, meaning that contracts are less visible and less easily identifiable. The challenge associated with identifying business opportunities is compounded by a lack of communication between public buyers and suppliers at pre- and post-tendering phases (Cabras, 2011; Erridge, Fee and McIlroy, 1999). Consequently, many SMEs operate with an information deficit around what the tendering process involves (European Commission, 1992). The fact that SMEs rank greater communication with public buyers as among the improvements they would most like to see confirms this point (GHK, 2010).

Public sector tendering involves not insignificant transaction costs, which small firms find difficult to absorb. Putting together a standard bid is estimated to cost £3200 in the EU and £5800 in the UK (Centre for Economic and Business Research and Gatewit, 2013). The cost factor is a recurring theme in SMEs' criticisms of public procurement. Time demands of completing tendering documentation and its associated financial costs ranked as two of the top three barriers in a survey of 3000

Irish SMEs (Flynn et al., 2013). In a contemporaneous survey undertaken by Ireland's Small Firms Association of its members 70 per cent criticised the length of the procurement process and 67 per cent criticised the costs incurred in preparing a bid (Small Firms Association, 2013). Tendering costs become even higher when SMEs enter into competition in foreign public procurement markets (Bovis, 1996). Inconsistent procedures across and even within public sector organisations adds to the costs of tendering (National Public Procurement Policy Unit, 2007). Migration to e-procurement has so far failed to eliminate this problem. SMEs still complain of complicated e-tendering procedures and having to submit paper copies of tenders (Centre for Economic and Business Research and Gatewit, 2013). These criticisms can be seen as part of a much wider problem for SMEs of government imposed 'red tape' and bureaucracy (Small Business Forum, 2006).

There are several other issues associated with the tendering process that deserve mention. Qualification criteria which are disproportionate to the nature and value of the contract are a common complaint of SMEs (Ringwald et al., 2009). These include financial capacity thresholds too high for small firms to meet, insurance cover requirements that do not reflect the risk profile of the contract, or conditions pertaining to number of years trading or previous experience that are not materially relevant to the contract. An overemphasis on price, as opposed to a broader conception of value for money, is another major barrier. Approximately 80 per cent of Irish firms identified this as disadvantageous in a recent study (Small Firms Association, 2013) and similar criticisms have been picked up in other studies (Cabras, 2011; Irish Business & Employers' Confederation, 2010; Loader and Norton, 2015; Michaelis, McGuire and Ferguson, 2003). Price-driven competition is a particular obstacle for SMEs competing in the pan-EU public procurement market

(GHK and Technopolis 2007; GHK, 2010). Narrow bid specifications and overly prescriptive requirements (Loader, 2005, 2014; MacManus, 1991) as well as ambiguous specifications (Loader and Norton, 2015) are other impediments. Finally, the large size of public sector contracts is known to prove extremely challenging for small firms; all the more so when public sector bodies bundle contracts together (Erridge, 1998; European Commission, 1992; Kidalov, 2015; Morand, 2003; Smith and Hobbs, 2001).

1.6.3 Limitations in SMEs' capacities

The barriers experienced by SMEs in tendering for public sector contracts are not confined to the external environment. Some are simply the product of organisational and resource limitations. Public buyers have averred to deficiencies in organisational capacity and uncertainty over financial health as reasons for why they do not consider SMEs as eligible suppliers (GHK and Technopolis, 2007; National Public Procurement Policy Unit, 2007). Equally, public buyers have been critical of SMEs for failing to grasp the idiosyncratic needs of public sector organisations and what it is they expect from suppliers (Greer, 1999; Michaelis, McGuire and Ferguson, 2003). The empirical evidence confirms that resource limitations do limit SMEs' ability to compete effectively. Karjalainen and Kemppainen (2008) demonstrated that a lack of legal resources and insufficient administrative capacity hampered SMEs' activity and confidence in the public sector marketplace. The smaller the SME the more pronounced the effect of resource limitations. In this vein, Flynn, McKevitt and Davis (2015a) found that tendering experience, human resource availability for compiling a tender, and participation in procurement training were all lower in micro-enterprises than firms with ten or more employees. Resource disparities such as these, along with organisational capacity and revenue, can act to

determine which SMEs win public sector contracts and which do not (Temponi and Cui, 2008). Compounding all the above is the negative preconceptions that many SMEs hold about public procurement (Michaelis, McGuire and Ferguson, 2003).

1.7 SME-friendly procurement policy

It is in direct response to the barriers discussed in the preceding section, particularly those external to the firm that governments have set about introducing SME-friendly policies. It is to these policies that the chapter now turns. SME-friendly policies have become a standard feature of the international public procurement landscape. In a recent OECD assessment, 29 of 32 countries surveyed had some type of support mechanism in place for SMEs and 11 of these had enacted policies or made legislative provision especially for SMEs (OECD, 2013). Through these policies governments are endeavouring to tackle the systemic barriers to SMEs' participation and success in public procurement. As such, they constitute a 'corrective mechanism' for recognised market failure in public procurement (Anglund, 1999). The form and intent of these policies vary by jurisdiction. In the EU the primary objective is to create a 'level playing field' on which firms of all sizes are able and willing to compete. Importantly, supra-national government action stops short of positive discrimination in favour of SMEs. By contrast, the US favours a more interventionist approach in which a certain percentage of federal contracts are set-aside for domestic SMEs. Further detail on SME-friendly policies in the EU, Ireland, the UK and the US is given in sections 1.7.1-1.7.4.

1.7.1 SME-friendly procurement policy in the EU

EU policy relating to SME participation in public procurement originated with the creation of an internal market for goods and services in 1992. Maximising the participation of small firms was back then, and continues to be, understood as critical

for the full realisation of the internal market and regional economic development. As envisaged in policy at that time, ‘greater participation of SMEs would add both to the quantity and quality of competition in public markets’ (European Commission, 1990:2). To increase SME participation a suite of ‘positive measures’ were set out in a series of official communiques (European Commission, 1989, 1990, 1992). These measures were designed to make it easier for small firms to compete in the public sector marketplace at home and abroad. Included among them was the simplification of tendering procedures, reduction in contract sizes, and the provision of information and training to small firms. European policy at this time was explicit in ruling out any arrangement that directly or indirectly discriminated in favour of small firms when tendering. The accent was on what could be done to ensure that SMEs found it easier to access contract competitions and be in a position to tender for business. Fostering competition and supporting a single EU market for goods and services was the dominant logic behind the policy.

The thrust of EU SME-friendly policy has not fundamentally changed since the creation of the Single Market in 1992. The forthcoming Procurement Directives¹² re-affirm the EU’s original position on how and why SMEs should be facilitated in competing for public sector business (European Commission, 2011c; Kotsonis, 2011). Public procurement policy is still driven by the ideal of creating a ‘level playing field for all economic operators wishing to participate in public tendering’ (European Commission, 2008c:2). The logic for policy intervention is still presented as a ‘win-win’ situation for SMEs, public sector organisations and the economy. Increased SME involvement is understood to bring about more competition, which

¹² The new EU Directives, which must be transposed into national law by April 2016, replace Directives 2004/17/EC and 2004/18/EC.

results in better value for money for the public sector. In parallel, growth and professionalisation opportunities for SMEs are created, with knock-on macroeconomic benefits. Just as it did in 1990, contemporary EU procurement policy, latterly in the form of the *European Code of Best Practices Facilitating Access by SMEs to Public Procurement Contracts*, advocates ‘positive measures’ designed to make it easier for SMEs to compete (European Commission, 2008c). The areas prioritised are still to do with minimising the administrative burden, helping SMEs to overcome problems relating to large contract sizes, and enhancing their knowledge of tendering. There has been no change in the pre-eminent belief in equality of opportunity for SMEs, as distinct from equality of outcome. SMEs’ interests are to be promoted, but without compromising competition in the marketplace.

1.7.2 SME-friendly procurement policy in Ireland

EU policy on SMEs and public procurement is mirrored across its Member States. Two countries will be used here for illustrative purposes: Ireland and the UK. During the last ten years successive Irish governments have sought to broaden SME participation in the public procurement marketplace as part of a more integrated approach to policy making (National Public Procurement Policy Unit, 2007). Like at EU level, the rationale for facilitating greater SME participation is grounded in concerns over economic competitiveness: SMEs are deemed vital to Irish economic competitiveness and public procurement is viewed as a critical enabler of SMEs’ survival and growth. Not surprisingly, the international financial crisis of 2007 galvanised political efforts to harness the resources of the Irish state, including public procurement, in support of SMEs (see section 3.11.3). A succession of policy initiatives was the outcome. The first of these was a consultation document entitled

Improving SME Access to Public Procurement (National Public Procurement Policy Unit, 2007). This was followed in quick succession by *Using Public Procurement to Stimulate Innovation and SME Access to Public Contracts* (Procurement Innovation Group, 2009) and *Facilitating SME Participation in Public Procurement* (Department of Finance, 2010). The second of these was updated and reissued in 2014 as *Initiatives to Assist SMEs in Public Procurement* (Department of Public Expenditure and Reform, 2014).

In its content and intent SME-friendly policy in Ireland resembles the *European Code of Best Practices Facilitating Access by SMEs to Public Procurement Contracts* (European Commission, 2008c). It too focuses on increasing the visibility of contracts through a national e-procurement portal; reducing information asymmetries by publishing tender information online; eliminating barriers to competing for contracts by using open tendering procedures as standard; reducing the administrative burden for firms by allowing them to self-declare their financial capacity and insurance cover; and addressing issues over too large contract sizes by, for example, encouraging SME consortia and dividing contracts into lots. Public buyers in Ireland are expected to adhere to these prescribed measures in order to facilitate SME participation. At the same time these measures are not legally binding and do not take precedence over EU Procurement Directives guaranteeing free and fair competition (McGovern, 2011). ‘Public sector purchasing must still be carried out in a manner that is legal, transparent, and secures optimal value for money for the taxpayer’ (Department of Finance, 2010:1). The ‘need to maximise competition in the market for goods and services purchased by the State’ is still paramount (National Public Procurement Policy Unit, 2005:4). As the same report goes on to

assert, 'where practical and legally possible the policy should also seek to promote whole of Government objectives' (2005:4).

1.7.3 SME-friendly procurement policy in the UK

The public procurement landscape in the UK is similar to Ireland. Over the last fifteen years a number of policies and codes designed to make it easier for SMEs to access the public procurement market have been adopted. The rationale for these policies is recognition that public procurement can contribute to SME growth and competitiveness. In 2003 the Office of Government Commerce published *Small Supplier...Better Value?* to highlight the advantages to public sector organisations of using SME suppliers (Office of Government Commerce, 2003). In 2005 the *Small Business Friendly Concordat* was initiated (Office of the Deputy Prime Minister, 2005). A voluntary, non-statutory code of practice, its purpose was to encourage local authorities to engage more with SME suppliers. Among the more recent developments is the *Public Services (Social Value) Act 2012*, which requires public sector agencies to consider the economic, social and environmental implications of their purchasing decisions. The signs are that this intervention is already starting to bear fruit (HM Government, 2014). The 2010-2015 Coalition Programme for Government contains a series of initiatives designed to increase SME involvement in the public sector marketplace (Cabinet Office, 2011). These include transparency in the advertising and award of contracts, eliminating non-essential procurement procedures, providing feedback on unsuccessful tenders, and expediting payments to suppliers. Again, these mirror the 'positive measures' set out at EU level (European Commission, 2008c).

The same Coalition Programme for Government has also set a target of 25 per cent of the total value of state contracts to go directly and indirectly to SMEs. Figures

released to date show that progress is being made towards reaching this goal, although with some way still to go. For the period 2012-2013 10.5 per cent of the total value of procurement contracts went directly to SMEs and an additional 9.4 per cent was awarded by way of sub-contracting (Cabinet Office, 2013). Individual government departments are also setting targets and reporting on their own progress. The UK Department of Health, for example, aims to double the value of its procurement spend with SMEs so as to reach 18 per cent by 2015 (Department of Health, 2013). Establishing an explicit target for SMEs' market share and then getting government departments to report on their progress towards meeting this target arguably adds greater focus and oversight to policy efforts. Of course, as with all EU Member States, the UK must still work within the parameters of the Procurement Directives in pursuing its SME-friendly policy agenda.

1.7.4 SME-friendly procurement policy in the US

Procurement policy in the US has commonalities with EU policy. It is predicated on the idea that small firms are vital to a dynamic economy and that public procurement has a critical role to play in supporting them - a principle first enunciated in the *Small Business Act 1953* (Clark and Moutray, 2004). To make this a reality the same Act articulates two related principles that govern federal procurement as it concerns small firms (Kidalov and Snider, 2011, 2013). The first principle of 'maximum practical opportunity' specifies structural and facilitative actions around the advertising of contracts, subcontracting plans and setting aside opportunities for small firms. The second principle of 'fair proportion' concerns contracting and subcontracting targets for federal agencies to meet. Compared to the EU, US federal policy is more interventionist. Contracts below a certain value are reserved or set-aside for small firms; and federal agencies are mandated to award a negotiated

percentage of their procurement spend to small firms¹³ (Denes, 1997; Herbert and Becker, 1985). It has, in other words, a legally-binding, compulsory element to it that EU policy lacks. A similar interventionist approach operates at US state level where set-asides and preference programs for small and locally-based firms are commonplace (Qiao, Thai and Cummings, 2009).

1.8 Compliance with SME-friendly procurement policy

Evident from the preceding discussion, policies to increase SME involvement in public procurement are common throughout the EU and the US, and even evince similarities in content. The formulation and official adoption of these SME-friendly policies does not, of itself, bring about change in public sector tendering. For change to happen policy has to be complied with. Someone has to do something or refrain from doing something, as the case may be (Montjoy and O'Toole, 1979). In public policy this 'someone' is invariably a public sector employee. Their attitudes, capabilities and eventual actions are a crucial determinant of whether public policy produces its intended effect or not (Beyer, Stevens and Harrison, 1983; Elmore, 1979; Matland, 1995). What is known on compliance with SME-friendly procurement policy is the subject of discussion here. Section 1.8.1 touches on recent commentary by procurement scholars on SME-friendly policy. They caution against pre-supposing that policy automatically translates into practice. Following on, section 1.8.2 reviews the little evidence that has been produced on compliance with SME-friendly procurement policy. Thereafter, consideration is given in section 1.8.3 to the possible reasons why evidence in this area has not been more forthcoming. The final section 1.8.4 assesses policy compliance in aspects of public procurement other than the facilitation of SMEs.

¹³ 23 per cent of prime contracts and 40 per cent of subcontracts.

1.8.1 Policy versus practice

It has long been argued that there is nothing inevitable about government intentions translating into practice at organisational level. Berman (1978), for example, made clear that policy is never ‘self-executing’ and that implementation of any government injunction should not be presupposed. Lipsky’s (1980) now famous account of the behaviour of public servants, or ‘street-level bureaucrats’, proved this point by exposing the disconnection between official policy and everyday practices. Recent policy perspectives have reiterated the importance of scholars not taking policy implementation for granted, arguing that macro policy aspirations and organisational practices do not necessarily coincide (De Leon and De Leon, 2002; Matland, 1995). These same maxims are just as applicable to SME-friendly procurement policy. Its translation into practice should not be taken for granted. Murray (2012) has quipped of these same policies that just because elected representatives declare a desire for reform does not mean that this will result in substantive change. Similar reservations have been expressed by others - Jones (2007), for example, in the case of SME-friendly procurement policy in South East Asian countries. The crux of the matter is that while procurement policies are ‘owned by ministries and agencies’, successful implementation of them depends on public servants who may not have the same level of dedication or even wherewithal to act on them (Georghiou et al., 2014:10).

1.8.2 SME-friendly procurement policy compliance: what we know

Interest surrounding SME-friendly procurement policy has not been matched by evidence on its implementation. While public buyers’ interaction with small suppliers has been examined using qualitative methods on a number of occasions (Loader, 2007, 2010, 2011; McKevitt, Flynn and Davis, 2014; Walker and Brammer, 2009), only a handful of studies have sought to directly test policy compliance.

Among them are assessments of the functioning of the EU-wide public procurement market undertaken in 2007 and repeated in 2010 (GHK and Technopolis, 2007; GHK, 2010). The 2007 study uncovered low-moderate rates of SME-friendly policy compliance among public buyers in EU Member States. Sixty per cent of public buyers were allowing consortia to jointly fulfil technical or financial capacity requirements¹⁴, 58 per cent were utilising e-procurement, 38 per cent were dividing contracts into lots and only 10 per cent were publishing PINs. The 2010 study involving 296 public buyers indicated that some progress was being made in advancing the SME-friendly agenda. By this time almost 80 per cent of public buyers were claiming to award contracts based on the most economically advantageous tender (MEAT) system and similar percentages were using flexible functional specifications and incorporating corporate social responsibility considerations into their evaluation criteria.

The extent to which SME-friendly procurement policy is translating into practice has also been reported on at national level. The UK government claimed that as of 2011 14 out of 17 of its departments had eliminated pre-qualification questionnaires for procurements valued below £100,000, which is in conformance with official policy recommendations (Cabinet Office, 2011). Two years later it added that the use of open tendering procedures for above EU-threshold contracts increased from 19 per cent in 2012 to 54 per cent in 2013, and that over 3000 low value contracts had been advertised online through the dedicated *Contracts Finder* site (Cabinet Office, 2013). Less positive, a review of the *Small Business Act* by the European Commission (2011d) found that only a minority of Member States had started to implement the *European Code of Best Practices Facilitating Access by SMEs to Public*

¹⁴ This measure is mandatory in the case of contracts above EU thresholds.

Procurement Contracts three years after its introduction in 2008. US government data shows that federal agencies have regularly failed to meet specified targets regarding the number and value of contracts that should be awarded to SMEs (Clark and Moutray, 2004). The same has been true of efforts to expand SMEs' presence in subcontracting in both the US and in the EU (Kidalov, 2013). Insights to emerge from the *International Research Study of Public Procurement* also point to problems experienced by governments in getting SME-friendly policies implemented and in evaluating their effects (Harland, Telgen and Callender, 2013).

In the academic domain, Murray's (2011) investigation of local government authorities in the UK found that approximately half of the sample had embedded SME-friendly procurement policy into their practices and strategy. Flynn and Davis (forthcoming) surveyed over 400 Irish public buyers on their policy compliance. Their results revealed SME-friendly policy to be of a truncated form wherein public buyers were acting on some but not all of the measures prescribed. For example, compliance was relatively high on the use of open tendering (75 per cent), the provision of feedback to unsuccessful tenderers (88 per cent) and allowing tenderers to self-declare their financial capacity and insurance cover to undertake the contract (80 per cent). Less impressive was compliance with measures designed to reduce barriers associated with contract size by, for example, dividing contracts into lots and encouraging consortium bidding. Only a minority admitted putting these measures into practice. In a separate paper the same authors examined SME-friendly policy compliance in Ireland using SMEs as informants (Flynn and Davis, 2015b). The SME verdict was that many of the measures devised for their benefit were not being put into practice. Consistent with what public buyers admitted, SMEs believed that dividing contracts into lots or encouraging consortium bidding was not

commonplace. As well, they did not agree that public buyers were using proportionate qualification criteria nor were they being flexible when it came to accepting proof of tenderers' financial capacity.

Collating the available data on SME-friendly policy compliance in public procurement leads to the following conclusions. Firstly, the evidence that has been put forward to date is contradictory. Some studies report moderate-high rates of compliance. Other studies report low rates. At the very least this should temper any assumption that SME-friendly procurement policy automatically translates into practice. Secondly, public buyers appear to be willing or able to act on some measures more than others. Thirdly, the data on SME-friendly policy compliance is not directly comparable as the measures tested differ in number and type from one study to the next. Fourthly, some of the findings are not representative of the population from which the data is drawn. Fifthly, the methodologies used by governments to determine what actions public buyers are taking to facilitate SMEs are opaque and some of the evidence is anecdotal. Consequently, there are questions over the accuracy and validity of any claims made. Finally, there has been little empirical scrutiny of the determinants of SME-friendly policy compliance. What we are left with is a dearth of reliable descriptive evidence on the extent of policy compliance and even less evidence or theoretical elaboration on what enables or inhibits it. The latter issue will be returned to in section 1.9.

1.8.3 Reasons for lack of evidence on SME-friendly policy compliance

There are a number of factors that likely explain why evidence on SME-friendly policy compliance has not been more forthcoming. To begin with, we must remember that public procurement is a new field of academic inquiry (Snider and Rendon, 2008; Thai, 2001). As such, it may simply be the case that researchers have

not got round to empirically examining SME-friendly policy. Poor oversight of SME-friendly procurement policy is another contributory factor. While the majority of OECD countries have taken steps to assist SMEs in public procurement, only a minority monitor policy effectiveness (OECD, 2013). This means that there is no repository of data for researchers to mine. A related issue is that government objectives for SMEs in public procurement are oftentimes vague and aspirational, as they are for SMEs generally (Storey, 1994, 2003). Such a situation does not lend itself to conducting policy assessments (Nicholas and Fruhmann, 2014). Questions around the impact of enterprise policies have tended not to be a priority for management scholars (Mason, 2009). Low engagement with SME-friendly procurement policy needs to be seen in this context. Methodological obstacles, particularly around identifying and accessing suitable respondent populations, could also be playing a part. Whatever the reason or reasons, the effect has been to leave us with a less than complete and satisfactory understanding of SME-friendly procurement policy in practice.

1.8.4 Procurement policy compliance: what we know

Researchers have been more proactive in investigating compliance in areas of public procurement other than SME-friendly policy. Prominent among these areas is adherence to EU law governing public procurement. The findings that have emerged imply that even legally-binding obligations are not immune to being disregarded by public buyers and their organisations. De Boer and Telgen (1998) estimated that among Dutch municipalities EC Procurement Directives were not being complied with in up to 80 per cent of procurement projects. Non-adherence to the legislative rules governing EU public procurement by, for example, failing to publish contract award notices was also detected by Martin, Hartley and Cox (1999) in the UK public

sector. 'Maverick buying', which denotes public servants sidestepping official purchasing rules, has also been shown to be pervasive in the public sector (Karjalainen, Kemppainen and van Raaij, 2009; Karjalainen and van Raaij, 2011). So too has opportunistic and unethical procurement behaviours. Comparing public and private sectors, Hawkins, Gravier and Powley (2011) observed that public buyers at the operational level deviated less from prescribed rules than their private sector counterparts. The situation was reversed at managerial level where public procurement managers were more opportunistic in their behaviours than private sector managers. As Khan (2013) has illustrated, buyers can end up constructing their own 'unwritten ground rules' in preference to official procurement procedures and best practices.

Compliance with environmentally responsible procurement policies has also generated interest among researchers and several in-depth studies exist on the topic. The common denominator is that policy recommendations are being followed up to a point. As evidence of this semi-compliance, Thomson and Jackson (2007:440) recorded some progress in the use of 'green' procurement practices at UK local authority level, but conceded that these were 'limited in terms of the range of products involved and the level of ambition'. Morgan (2008) was also able to discern positive developments in the procurement of fresh, locally-produced food while admitting that sustainable procurement practices remained, for the most part, aspirational. Assessments on sustainable procurement initiatives being of a 'patchy nature' and only being engaged in to a 'modest extent' have also transpired in research by Preuss (2007), Walker and Brammer (2009) and Mansi (2015). Gormly (2014) reported growing acceptance of sustainability considerations within Irish semi-state companies, although internal and external barriers to its full realisation

had by no means disappeared. Policy implementation deficits in sustainable purchasing find their match in the wider literature on environmental protection and corporate social responsibility (see, for example, Krause, 2011; Nilsson, Eklund and Tyskeng, 2009; Pitt, 2010; Randhawa and Marshall, 2014).

1.9 Explaining compliance with SME-friendly procurement policy

The previous section compiled what evidence there is on compliance with SME-friendly policy and procurement policies and regulations generally. Now this section explores what is known on the factors that promote or inhibit compliance. The answer, in short, is very little. As demonstrated in section 1.8.2, there is a paucity of evidence and theorising on compliance with SME-friendly procurement policy. To date, only one study by Flynn and Davis (forthcoming) has empirically tested predictors of SME-friendly policy compliance among public buyers. In it the authors found that policy familiarity, procurement involvement and the perceived importance of SME involvement in public contracting acted as enablers of policy compliance. Apart from this no other comparable study has been undertaken. Several studies have tested predictors of compliance behaviour across other aspects of procurement and so their findings are overviewed in section 1.9.1. Debates on tensions in the public procurement policy environment and the way in which ‘public agencies are pushed and pulled in many directions simultaneously’ (Boyne, 2002:101) are engaged with in section 1.9.2. These debates are relevant to explaining compliance as they imply that the multiple, contradictory demands governments make in public procurement are responsible for vitiating the SME-friendly agenda and preventing public buyers from acting on its policies.

1.9.1 Predictors of compliance behaviour in public procurement

Some investigation has been undertaken on the factors that affect the implementation of procurement policy. Results from this line of inquiry show that the individual attributes of public buyers, the organisational context and the macro-policy environment all come into play (see Table 7). At the individual level policy awareness, personal motivation, professionalism and perceptions around administrative burdens have been put forward and, in some cases, tested. For example, the evidence indicates that the human capital of purchasing professionals has a positive impact on adherence to procurement rules (Hawkins and Muir, 2014); that motivation, commitment and ‘buy-in’ are prerequisites to socially responsible procurement practices (Murray, 2011; Thomson and Jackson, 2007; Williams and Smellie, 1985); and that the perceived work effort associated with legal injunctions affects compliance (De Boer and Telgen, 1998). Organisational factors germane to explaining policy compliance include managerial support, incentives and monitoring (McCarthy, 2006; Nijaki and Worrel, 2012; Tukamuhabwa, 2012). Macro-environmental factors, particularly contradictory policy directives emanating from government, have also been cited in rationalising non-compliance with sustainable procurement (Coggburn and Rahm, 2005; Morgan 2008; Schapper, Veiga Malta and Gilbert, 2006). There is, therefore, a broad range of factors linked to compliance behaviour in procurement. Importantly, in only a few studies are these factors theoretically grounded (Blount and Hill, 2015; Gelderman, Ghijsen and Schoonen, 2010; Mwakibinga and Buvik, 2013).

Table 7 Predictors of policy compliance in public procurement

Factor	Authors
<i>Individual</i>	
Policy awareness	Coggburn and Rahm (2005); Flynn and Davis (forthcoming) Gelderman, Ghijsen, and Brugman (2006); Karjalainen, Kemppainen and van Raaij (2009); Mwakibinga and Buvik (2013); Tukamuhabwa (2012)
Personal motivation	Flynn and Davis (forthcoming); Karjalainen, Kemppainen and van Raaij (2009); Murray (2011); Thomson and Jackson (2007); Williams and Smellie (1985)
Professionalism	Blount and Hill (2015); Flynn and Davis (forthcoming); Hawkins and Muir (2014); Morgan (2008); Murray (2011); OECD (2013); Tukamuhabwa (2012); Williams and Smellie (1985)
Perceived administrative burden	De Boer and Telgen (1998)
<i>Organisational</i>	
Top/middle management support	McCarthy (2006); Nijaki and Worrel (2012); Thomson and Jackson (2007); Tukamuhabwa (2012)
Organisational incentives	Gelderman, Ghijsen, and Brugman (2006); Nijaki and Worrel (2012); Tukamuhabwa (2012)
Monitoring and sanctions	Blount and Hill (2015); Gelderman, Ghijsen and Schoonen (2010); Mwakibinga and Buvik (2013)
<i>Macro-policy environment</i>	
Competing policies and goals (incl. cost reduction pressures and legal obligations)	Coggburn and Rahm (2005); Morgan (2008); Preuss (2007); Schapper, Veiga Malta and Gilbert (2006); Thomson and Jackson (2007); Walker and Brammer (2009); Williams and Smellie (1985)

1.9.2 Goal conflict in public procurement

Debates over the expanding remit of public procurement are also revealing as regards compliance with SME-friendly policy in this area. Two points are relevant here. Firstly, conflicts are said to exist between proximate procurement goals like value for money and legal compliance with ‘softer’ goals like facilitating greater SME participation and protecting the environment (Herbert and Becker, 1985; Erridge and McIlroy, 2002; Matthews, 2005; Pickernell et al., 2011; Schapper, Veiga Malta and Gilbert, 2006). Secondly and relatedly, these conflicts are believed to render SME-friendly policy objectives ‘contested, unclear, or misaligned’ (Kidalov and Snider, 2011:5). These points will now be discussed in more detail.

Public sector management is subject to multiple demands made by elected representatives, regulators, media and non-governmental organisations (Boyne, 2002). These multiple stakeholder demands cascade down to the functional level, which includes procurement (OECD, 2013; Telgen, Harland and Knight, 2007). Scholars have argued that it is not altogether obvious how, if at all, these multiple demands can be reconciled (Bovaird, 2006; Gelderman, Semeijn and Bouma, 2015; Martin, Berner and Bluestein, 2007). The situation has been likened to one in which public sector organisations are expected to behave like private sector entities while simultaneously giving effect to policy objectives grounded in the public interest (Astrom and Brochner, 2007; Greer and Hoggett, 1999). Inevitably, this creates tensions within organisations over how procurement should be managed and whose interests it should serve.

Pressures to minimise spending costs are known to militate against SME involvement in public procurement. This was certainly the conclusion Loader (2007:313) reached. She noted that ‘while procurement officers would like to do business with small firms, in practice their primary aim is to achieve value for money’. The same phenomenon has been observed elsewhere. Cabras (2011) and Peck and Cabras (2010) found that cost-effectiveness arguments typically emerge as politically expedient, practically dominant and easier to justify to public fund-holders than taking the steps required to accommodate small firms. Recently, 63 per cent of public buyers surveyed by the National Institute of Government Purchasing (2013) admitted that budgetary constraints restricted their ability to leverage procurement for economic, environmental and social sustainability objectives. SME participation is not the only casualty of cost containment pressures. Sustainable and environmentally-friendly purchasing is also compromised (Coggburn and Rahm,

2005; Preuss, 2007; Walker and Brammer, 2009). Tensions between cost reduction and the socio-economic dimension to public procurement are unlikely to abate any time soon. If anything, trends towards consolidated purchasing arrangements and pressures to exploit economies of scale will only exacerbate the situation (Loader, 2013; Morand, 2003; Smith and Hobbs, 2001).

Along with cost pressures, legal obligations pose a challenge to the realisation of SME-friendly policy. Across the EU public buyers are compelled to ensure that procurement is carried out in accordance with the EU Treaty principles of non-discrimination, equal treatment, transparency, mutual recognition, proportionality, freedom to provide service, and freedom of establishment (National Public Procurement Policy Unit, undated). Whether they would like to or not, public buyers are prohibited from discriminating in favour of domestic SMEs or any other atypical supplier when awarding a contract (Arrowsmith, 1995; Bovis, 1998; Fee, 2002). To the extent that SMEs' interests are promoted, this can only be done within the parameters of EU procurement law¹⁵. The aftermath of the 2007 financial crisis threw this constraint into sharp relief as Member States were disbarred from ring-fencing contracts for their struggling domestic SME sectors (Murray, 2009a). The same legal constraints apply in the case of promoting sustainable purchasing. Tellingly, legal ambiguity appears to have a dissuasive effect on public buyers following through on environmentally-friendly policy recommendations (Morgan, 2008; Thomson and Jackson, 2007). Summarising this section, it is clear that

¹⁵ Directive 2004/17/EC of the European Parliament and of the Council of March 31, 2004 co-ordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors [2004] OJ L134/1 and Directive 2004/18/EC of the European Parliament and of the Council of March 31, 2004 on the co-ordination of procedures for the award of public works contracts, public supply contracts and public service contracts [2004] OJ L134/114.

competing priorities in public procurement are relevant to explaining the effectiveness or otherwise of SME-friendly policy.

1.10 Conclusion

The main strands of the SME-friendly procurement debate have now been covered. The chapter itself is based on a comprehensive literature review, drawing on academic studies and government reports at the intersection of SMEs, public procurement and public policy. There is no doubt but that SME-friendly procurement constitutes a burgeoning line of inquiry. In large part this is due to successive government policy initiatives over the last two decades, which have been designed to increase the number of SME suppliers in the public sector. These initiatives have, in turn, stimulated academic engagement. Scholars have paid particular attention to the barriers that stifle SME participation in the public sector marketplace as well as the actions governments are taking to eliminate these barriers. There is near universal consensus that SME-friendly policy is justified not only in the interests of SMEs but also in the interests of public sector organisations and national economic competitiveness. Outside of these research foci a prosaic yet crucial aspect of the debate has fallen under the radar of scholars: compliance with SME-friendly procurement policies. Amid all the discussion on ways to help small firms, questions on whether these policies are being complied with and the factors that promote or inhibit this process have gone largely unasked. This represents a significant gap in the literature, one which this study sets out to address. Towards this end the next chapter offers a theoretically-informed view of compliance with SME-friendly procurement policy.

Chapter 2:

An institutional view on SME- friendly procurement

2.0 Overview of chapter two

Chapter one reviewed the literature on SME-friendly public procurement. This chapter presents institutional theory as a lens that can be used to explain and predict compliance with SME-friendly procurement policy. Prior to demonstrating the applicability of institutional theory in this respect, a number of preliminary aspects on the use of theory are dealt with. Section 2.1 begins with a general discussion on theory by interrogating its meaning, its purpose in social inquiry and issues associated with its use in management science. Rumination on these issues is advisable before immersion in the details of any one theory. Section 2.2 weighs up the use of theory to date in SME-friendly procurement and in the wider public procurement field. Emerging from this exercise is the predominantly a-theoretical character of research at the intersection of SMEs and public procurement. This can be seen in the context of a public procurement research domain that is itself relatively under-theorised. Having scrutinised the theoretical profile of the field, section 2.3 makes the case for using institutional theory. It does so by reference to its suitability for explaining and predicting responses to SME-friendly procurement policy, its novel application to this topic, and its scientific validity.

The second half of the chapter focuses on the tenets of institutional theory. By way of introduction section 2.4 provides an outline of what institutional theory explains and predicts of organisational practices and what this means for investigating SME-friendly procurement policy. Section 2.5 goes into greater detail on the main elements of institutional theory. It describes the emergence of ‘new institutionalism’ and explains why the concepts of legitimacy and isomorphism are central to institutional explanations of organisational behaviour. Section 2.6 focuses on institutional forces. It clarifies what is meant by the term ‘institution’ and what

purpose institutions serve in social relations. It also outlines the three main types of institutional forces: regulative, normative and cultural-cognitive. Section 2.7 critiques institutional theory on two points. Firstly, individuals are not always willing or able to conform to the institutional demands made of them. Secondly, institutional environments are often contested. Section 2.8 reproduces Oliver's (1991) predictive framework for how individuals respond to institutional pressures aimed at changing their behaviour. The framework encompasses rationales for institutional compliance, the institutional context, the content of institutional pressures and the institutional control mechanisms in operation. In section 2.9 the same predictive framework is used to hypothesise relationships between institutional pressures and SME-friendly compliance behaviour among public buyers.

2.1 Considerations on theory

Theory selection is among the most important decisions to be taken when conducting research. Theories influence the research questions we ask, the type of data we deem acceptable and the way we interpret our findings (Miller, 2007). Theory selection is also among the most challenging decisions for management researchers. While some disciplines enjoy paradigmatic consensus and coalesce around a few major theories, management science adopts a more permissive attitude (Pfeffer, 1993). This is evident in the pervasiveness of economic, psychological and sociological theoretical perspectives in management research (Agarwal and Hoetker, 2007). If theoretical plurality can be viewed as advantageous in terms of offering alternative perspectives and new ideas for management researchers to work with, it can also lead to uncertainty and confusion when it comes to theory selection – a case of having too much choice. Before setting out the theoretical framework in this study, two

questions fundamental to scholarship in management science need to be addressed¹⁶. The first is ‘what is theory’? As with SMEs, public procurement and policy, clarity over the meaning of theory is essential. The second is ‘why do we use theory’? In deliberating on the pluses and minuses of selecting one theory over another, it is vital that we do not lose sight of the purpose of theory in research. These issues are explored in more detail in sections 2.1.1-2.1.4.

2.1.1 What is theory?

There is no doubt that theory has assumed greater prominence as management science has matured, largely in consequence of decisions taken over fifty years ago to strengthen its scientific underpinnings (Bailey and Ford, 1996). Reviews of premier management journals show that the number of articles making a theoretical contribution, either through theory testing or theory building, increased steadily between 1963 and 2007 (Colquitt and Zapata-Phelan, 2007). Management-specific theories have proliferated over the same period and are now used alongside the more established psychological, sociological and economic theories for studying organisations and markets (Agarwal and Hoetker, 2007). These developments reflect agreement on the criticality of theory in management research. There is less agreement over what theory means. Within management science theory is variously understood and presented as a set of covering laws that explain and predict social phenomena, a detailed and plausible account of a social process, and even a form of enlightenment (Colquitt and Zapata-Phelan, 2007; Di Maggio, 1995). The input of different disciplines and their associated theories, research foci and methodologies account for these multiple interpretations (Pfeffer, 1993). In practice, the varying

¹⁶ There is a long running debate over the role of theory in management science. Over the last three decades numerous editions of premier journals have been dedicated to debating theory, including: *Administrative Science Quarterly*, 1982 Vol. 27 (4) & 1995 Vol. 40 (3), *Academy of Management Review*, 1989 Vol. 14 (4) and *Academy of Management Journal*, 2007 Vol. 50 (6).

conceptions of theory in management science are not mutually exclusive, and many of the best theories incorporate generalizable laws, thick descriptions and deductive, inductive and enlightenment aspects (Di Maggio, 1995).

Differences in emphasis on its meaning notwithstanding, a theory should contain four essential elements (Whetten, 1989). To begin with, it must have variables, constructs or concepts that explain the phenomena of interest. Next, it must specify how these variables, constructs or concepts are related to one another. There must also be a rationale or logic associated with the selection of factors and their causal relationships. Finally, all theories should have contextual and temporal boundaries that set the limits of generalisability for its use. In this way a theory can be understood and defined as ‘a statement of relationships between units observed or approximated in the empirical world’ (Bacharach, 1989:498). These relationships are simplified by the use of abstract concepts which are tested using operationalised definitions (Thompson, 1956). Acceptance of theory on these terms enables researchers to differentiate it from the ‘half-baked pretensions to theory’ that abound in the literature (Weick, 1995:385). It also means that researchers do not confuse theory with citations of other scholars’ work, raw data, variables, diagrams and hypotheses (Sutton and Staw, 1995). At the same time we should be mindful that theory is not only a finished product but oftentimes a work in progress, and that data, variables, diagrams and hypotheses form part of the ‘interim struggle’ of theory development (Weick, 1995).

2.1.2 Why do we use theory?

Articulating theory as a statement of relationships between entities in the empirical world is suggestive of its descriptive, explanatory and predictive roles. As researchers theory helps us to organise our thoughts and knowledge, formalise our

predictions, generate coherent explanations of real world phenomena, develop hypotheses and integrate knowledge (Hambrick, 2007; Miller, 2007). It is how we make sense of, disaggregate and rationalise the complex phenomena we are interested in revealing. Theory, as Bacharach (1989:513) succinctly puts it, is 'how we diminish the complexity of the empirical world'. It guides us to concepts that might be relevant to a problem (De Vaus, 1991) and provides us with a 'story about why acts, events, structure, and thoughts occur' (Sutton and Staw, 1995:378). As well as scientific value theory can also be of practical utility. Good theory not only 'advances knowledge in a scientific discipline' but also 'guides research toward crucial questions, and enlightens the profession of management' (Van de Ven, 1989:486). Herbert Simon (1967), a pioneer in management research, stated his conviction that the success of business research and education depends on its ability to synthesise knowledge from scientific conceptions of management with insights from the real world of organisation management. Premier management science journals such as *Administrative Science Quarterly* espoused similar values at their outset, envisaging theory as a threefold strategy 'to organize knowledge, guide future research, and inform practice' (Litchfield, 1956; Palmer, 2006:538).

2.1.3 Scientific validity versus practical utility

By most accounts theory has a dual mandate of contributing to management as science and informing business practice. In reality scholars appear to have privileged the former over the latter. This led Hambrick (2007:1351) to bemoan a 'hyper-commitment to theory' which stymies the emergence of interesting facts and Gunther McGrath (2007) to diagnose an identity crisis afflicting the management field. Ghoshal (2005) even went so far as to posit that morality and common sense have fallen victim to the pursuit of management as a science. What we have ended

up with is the dominance of ‘pedantic science’ over ‘pragmatic science’ in the opinion of Anderson, Herriot and Hodgkinson (2001). The implications of an ascendancy of theory in management science are understood in quite stark terms. Miller (2007:179) spoke of interesting and novel empirical findings being straitjacketed with a particular theory, linked to meretricious reasoning or couched dishonestly in explanations that were formulated post hoc. Tushman and O’Reilly (2007:770) claimed that ‘self-imposed distance from the phenomena we study reduces the quality of our field’s research, undermines the external validity of our theories, and reduces the overall relevance of the data used to test theories’. For these and other scholars, contemporary management research stands accused of the ‘compulsive and mindless theorizing’ that Hirschman (1970:329) railed against some decades previously.

2.1.4 Re-orienting management science

Responding to the above criticisms, efforts are being made to re-orient management research so that its outputs are more relevant to business practitioners. Echoing earlier work by Thompson (1956), Tranfield and Denyer (2004) contemplated management in terms of a professional science much like engineering or medicine. Under the epithet of ‘engaged scholarship’ Van de Ven and Johnson (2006) raised the idea of academics and practitioners working more closely together to solve contemporary organisational challenges. Along similar lines Gunther-McGrath (2007) and McGahan (2007) separately recommended a focus on managerially actionable problems. Starkey and Madan (2001) envisaged increasing practitioners’ stake in the research process as the way forward. Allowing the space and time for empirical regularities to emerge before prematurely trying to explain why they occur is also regarded as conducive to more practice-focused research (Hambrick, 2007;

Helfat, 2007). These various proposals are predicated on the assumption that rigour and relevance are not mutually exclusive (Gulati, 2007). Not everyone shares this view. Some see ‘engaged scholarship’ as quixotic (McKelvey, 2006; Weick, 2001). Others point to a conflict between theoretical rigour, which aims to formulate general propositions, and practitioner relevance, which depends on context-specific knowledge (Aram and Salipante, 2003; Hammersley, 1992). Miner (1984) even demonstrated that the perceived validity of a theory is not necessarily related to its practical relevance. Based on what we know so far, pursuing rigour and relevance through theoretical application, while laudable, is a challenge in management science.

2.1.5 Implications for this study

The foregoing discussion has sought to clarify what is meant by theory and why we use it in social scientific inquiry. These are not trivial questions. Rumination on them leads to more judicious and purposeful use of theory, which is the reason why they opened this chapter. In the first instance, being clear on what constitutes a theory helps to avoid the pitfall of confusing citations, models or hypotheses for theory. This is important because not everything that is labelled ‘theory’ is theoretical in the sense of a statement of relationships between observable phenomena that is underpinned by a defensible logic (Sutton and Staw, 1995; Weick, 1995). Secondly, having a clear sense that theory should be used to explain and predict social phenomena helps to ensure that it is exploited to maximum effect (Bacharach, 1989; Thompspon, 1956). A failure to grasp the purpose of theory increases the likelihood that it is only used descriptively. Relatedly, an understanding of the purpose of theory implies an awareness of its potential to contribute to practice (Litchfield, 1956; Simon, 1967; Van de Ven and Johnson, 2006). Not fully grasping this aspect

of theory's purpose means that converting research findings into practical insights for policy makers and managers is less likely to happen.

2.2 Theory in the public procurement domain

As stated at the outset of this chapter, theory selection is among the most important and challenging decisions in the research process. In this study a theory had to be found that was suitable for investigating compliance with SME-friendly procurement policy. A broad sweep of the major theories in management science was initially undertaken. Recourse was made to compendiums of management and its 'greatest thinkers' by Pugh and Hickson (2007) and Smith and Hitt (2005). Additional literature on individual theories and their originators was then consulted depending on the initial appraisal of their usefulness. Included in this category was Lindblom's (1959, 1979) 'muddling through' theory of policy and governance, decision making theory (Simon, 1959, 1979) and principal-agent theory (Eisenhardt, 1989a; Jensen and Meckling, 1976). Yukins (2010) recently proposed the latter as an overarching theory for public procurement. Notwithstanding the respective merits of each of these theoretical perspectives, institutional theory was selected. The decision to use institutional theory was taken after careful deliberation on the part of the researcher and in consultation with the supervisory team. The suitability of institutional theory for this study and the contribution it makes is set out in section 2.3. Before this, the use of theory in research on SME-friendly procurement and cognate areas is examined.

2.2.1 Theory and SME-friendly procurement

A review of the literature on SME-friendly procurement reveals that there has been minimal use of theory. Empirical studies which examine SME-friendly procurement from the perspective of either public buyers or suppliers have tended to do so

without using an explicit theoretical frame of reference. Previous research is cited, government data is used and models and hypotheses put forward but no attempt is made to theoretically anchor the study. As a result, studies are strong on description but less so on explanation. This is evident, for example, in Loader's (2011) examination of local authority purchasing practices where difficulties in accommodating small firms are reported on but the problem itself is not theoretically framed. To take another example, Fee, Erridge and Hennigan (2002) do not employ any theoretical framework in their assessment of SMEs' access to public procurement in Northern Ireland. Flynn and Davis (forthcoming) tentatively put forward an institutional interpretation of public buyers' responses to SME-friendly policy initiatives but without operationalising any of the theoretical concepts. A recent exception is Blount and Hill's (2015) use of policy implementation theory to investigate the success of supplier diversity initiatives. The predominantly a-theoretical form of studies to date is something of a mixed blessing for researchers. On the plus side it means that there is ample opportunity to make a substantive contribution to the field. The flipside is that there is little in the way of precedent to work with.

Theory does feature in some non-empirical studies on SMEs and public procurement. Principal-agent theory is cited by Kidalov and Snider (2013) in discussing policy support for SMEs; as it is by Soudry (2007) and Yukins (2010) for explicating regulatory compliance and public accountability in public procurement respectively. It is, as Yukins (2010) contends, a prism through which we can rationalise the strategies adopted by the principal (i.e. government) and its agents (i.e. public buyers and their organisations) when the former seeks to impose its mandate through the latter. Erridge (1998) invokes no less than three theories in

discussing public procurement and the involvement of small firms therein: public choice theory; transaction cost theory; and ‘new public management’ theory. The latter, for example, suggests a private sector ethos for public purchasing, which presents both opportunities and threats for small suppliers. Institutional theory is averred to by Kidalov and Snider (2011) in explaining the origins and perpetuation of norms and structures in national public procurement systems. Theory is not operationalised or tested in these or any other policy-related investigation of SMEs and public procurement, however.

2.2.2 Theory and procurement policy

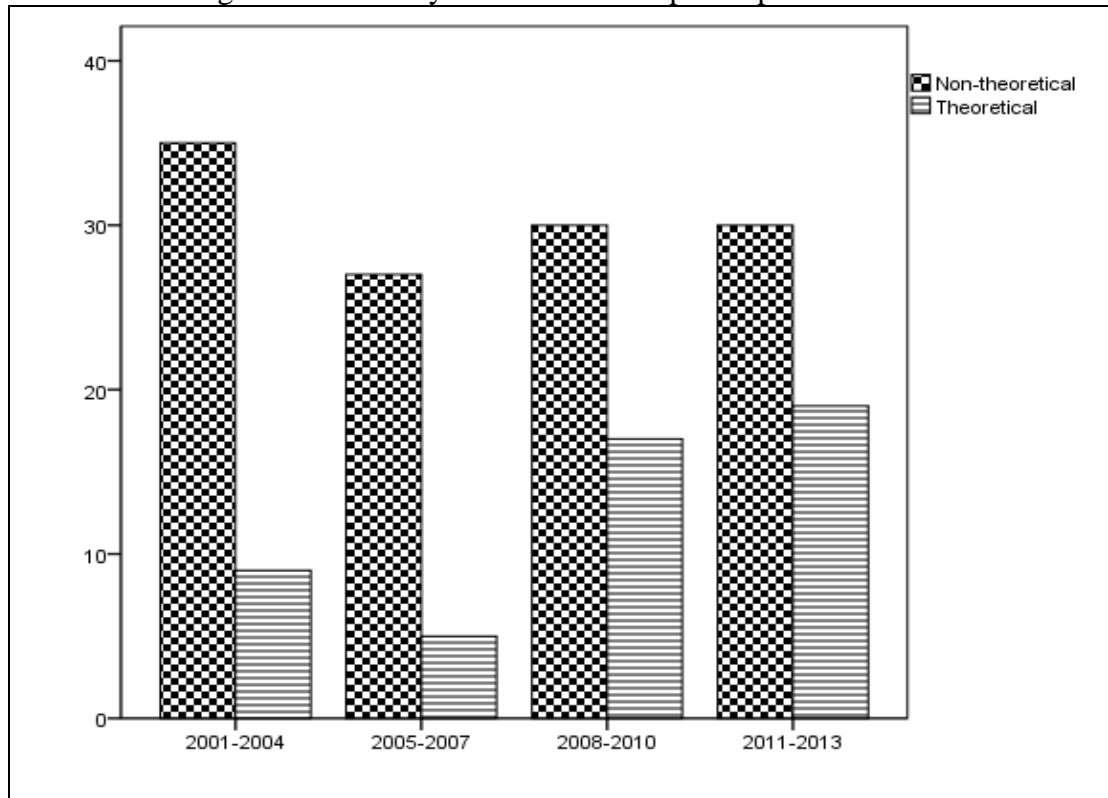
As with SME-friendly policy, studies which concentrate on compliance in other aspects of public procurement are predominantly a-theoretical. Survey-based assessments of policy compliance have relied on previous empirical findings to identify variables for testing (De Boer and Telgen, 1998; Karjalainen, Kemppainen and van Raaij, 2009; Gelderman, Ghijsen and Brugman, 2006). Exceptions include the application of principal-agent theory to explain and predict regulatory compliance (Mwakibinga and Buvik, 2013), institutional theory to account for environmentally-friendly purchasing (Hoejmoose, Grosvold and Millington, 2013), and psychological-based theories to do the same thing (Preuss and Walker, 2011). Theoretical application is no better in qualitative inquiries. Coggburn and Rahm (2005), Morgan (2008), Preuss (2007), Thomson and Jackson (2007) and Walker and Preuss (2008) each discuss the drivers of ‘green’ procurement, overview the findings of previous studies and research reports, and detail the policy context of their studies. Yet no attempt is made to ground the empirical component in an overarching theoretical framework. This represents a missed opportunity for advancing knowledge in the procurement field. There is no shortage of theory options for

exploring procurement policies, as Gelderman, Ghijsen and Brugman (2006) have pointed out. The problem, instead, appears to be one of reticence on the part of researchers in using it.

2.2.3 Theory and public procurement research

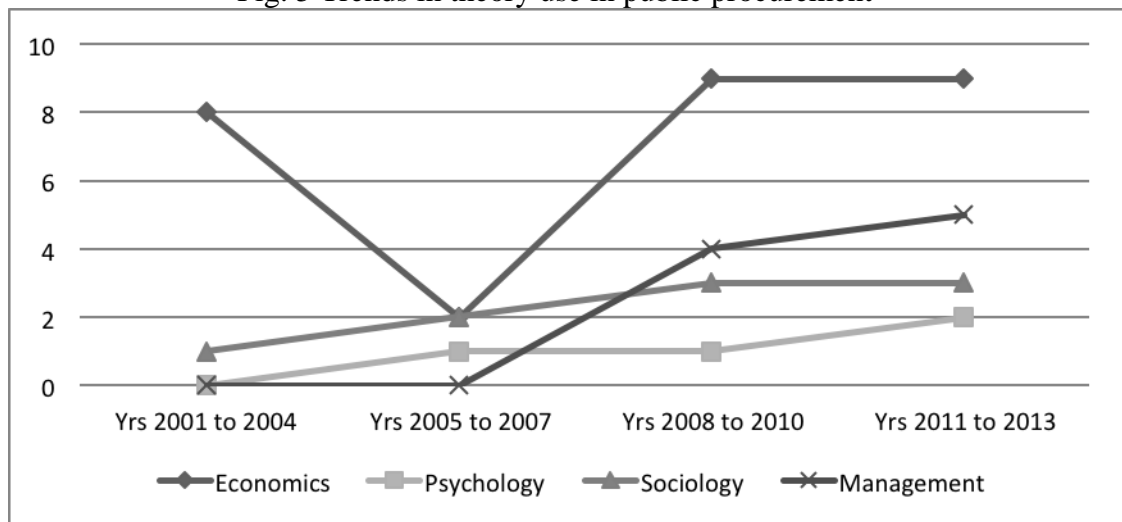
As an academic field public procurement is also marked by a deficit of theoretical application. Analysis carried out by Flynn and Davis (2014) revealed that only 29 per cent of articles published in the *Journal of Public Procurement* between 2001 and 2013 had a theoretical base. To put this in context, the comparable figure for supply chain management was estimated at 37 per cent by Chicksand et al., (2012) and 53 per cent by Defee et al., (2010). The same review by Flynn and Davis (2014) did determine, however, that the incidence of theoretical articles in public procurement is on an upward trajectory (see Fig. 4). While 20 per cent of output published between 2001 and 2004 had some theoretical grounding, this figure had increased to 36 per cent by 2010 and to 39 per cent by 2013. In respect of the theoretical content of public procurement research, Flynn and Davis (2014) found that the economics discipline has predominated. Approximately 56 per cent of theoretically-informed articles had their antecedents in economic theory. Examples included theory of auctions and competitive bidding, principle-agent theory, transaction cost economic theory and contract theory. The three disciplines of sociology (18 per cent), management science (18 per cent) and psychology (8 per cent) made up the remainder (see Table 8, pg. 87). Trends analysis suggests that economic theory will continue to prove influential, but that management theory may start to rival it in the coming years (see Fig. 5).

Fig. 4 Theoretically-based articles in public procurement



Flynn and Davis (2014)

Fig. 5 Trends in theory use in public procurement



Flynn and Davis (2014)

Table 8 Disciplinary influences in public procurement research

Discipline	Frequency	Percentage	Individual Theories
Economics	28	56	Theory of auctions & competitive bidding Principal-agent theory Transaction cost economic theory (including in combination with other theories) Contract theory (including in combination with other theories) Fuzzy set theory Game theory (including in combination with other theories) Classic economic theory New institutional economic theory
Sociology	9	18	Institutional theory General systems theory Social constructivism Social exchange theory Social network theory Theory of professions
Management	9	18	Organisation behaviour theory (including in combination with other theories) Supply chain management theory Healthcare management theory Organisation learning theory Theory of innovation Theory of lean
Psychology	4	8	Leadership theory Process theory (of trust) Theory of self-determination
Total	50	100	

Flynn and Davis (2014)

2.2.4 Assessment of theory use

From the preceding review it is clear that there has been relatively low application of theory in public procurement scholarship. This is true of studies focusing on SME-friendly procurement, which are predominantly descriptive in nature. It is equally true of research on sustainable procurement. The public procurement field as a whole is also under-theorised, although signs of progress and maturation can be discerned. The paucity of theory in public procurement has not escaped the attention of other

researchers. Snider and Rendon (2008:311) were minded to say that ‘scholars have yet to give sufficient efforts to the sort of conceptual theorising about policy that will lead to ordering devices and approaches that can help researchers and students make sense of its complexity, uses and limitations’. Earlier, Snider (2006) hinted at a tendency towards introspection in public procurement research and a failure to marry it to more overarching theoretical frameworks. McCue and Prier (2008) and Yukins (2010) have each alluded to the need for more theoretical application if our knowledge of contemporary procurement phenomena is to mature and develop. Theoretical rigour need not come at the expense of practitioner relevance. To quote Dimitri (2013:152), ‘daily procurement design can benefit from the more robust theoretical findings, while practice can fruitfully feed academic research with new problems, suggestions and intuitions’.

2.3 Justifying the use of institutional theory

Having mapped theory usage in public procurement, this section sets out the justification for taking an institutional perspective on compliance with SME-friendly policy. Justification for this choice rests on three pillars. The first is relevance and appropriateness. Institutional theory explains why individuals comply with government policies and identifies the conditions under which compliance is more or less likely to come about. The second is originality. There has been limited application of institutional theory in public procurement research. Its deployment here holds out the promise of making a substantive contribution to the existing body of knowledge. The third is validity. Institutional theory enjoys prominent status in management science. Its application to SME-friendly procurement stands to strengthen the scientific underpinnings of the latter by infusing it with greater explanatory depth. Sections 2.3.1-2.3.3 address these three arguments in more detail.

While the case for using institutional theory is strong, no claim is made that it is *the* definitive lens to investigate compliance with SME-friendly procurement policy. Conceding this point is consistent with the critical realist philosophical stance operative in this study (refer to Chapter 3). For critical realists, scientific theories are ‘under-determined’ by nature, meaning that the possibility of an alternative theory that better explains the phenomenon of interest can never be discounted (Phillips, 1990).

2.3.1 Relevance to topic

The focus of this study is on compliance with SME-friendly procurement policy. Institutional theory is an obvious choice as it is about institutional pressures - of which SME-friendly policy is one - and how and why individuals and organisations respond to these pressures. Institutional theory highlights the role that government and professional bodies play in influencing organisational practices (Schneiberg and Clemens, 2006). SME-friendly policy is an attempt by government to influence procurement practices within public sector organisations. Specifically, it is an attempt by governments to change the behaviour of public buyers so that procurement practices are more facilitative of SMEs. In pursuing this course governments are hoping to institutionalise SME-friendly purchasing practices. Institutional theory is especially suited to research contexts in which the profit motive does not figure. Here the research context is public procurement, which is shaped and bounded by policy and political diktats (Lian and Laing, 2004). In its most recent form institutional theory identifies the conditions under which compliance with policies, laws, norms and taken-for-granted cultural assumptions is more or less likely to come about (Oliver, 1991). This is critical as one of the main motivations for this study is to predict compliance with SME-friendly procurement

policy. Finally, institutional research is synonymous with real-world empirical questions (Davis and Marquis, 2005; Steinmo, 2008). Investigating policy compliance in public procurement sits comfortably within this tradition.

2.3.2 Novel application

Employing institutional theory to explain and predict compliance with SME-friendly procurement policy is original and novel. To date, no study has operationalised institutional theory for this purpose. In contrast, institutional theory has been used as the basis for predictive models on the uptake of environmentally sustainable purchasing practices (Hoejmose, Grosvold & Millington, 2013; Sancha, Longoni and Gimenez, 2015; Zhu, Sarkis and Lai, 2013). Doherty, McConnell and Chadwick (2013) also relied on it to interpret external pressures on public sector organisations to implement e-procurement technology. Several non-empirical studies have weaved institutional explanations into their arguments. Relevant here is Kidalov and Snider's (2011) comparative account of procurement regimes in the US and the EU; Akenroye's (2013) discussion of how social responsibility criteria have come to be incorporated into contract award processes; and Dickens-Johnson (2008) assessment of outsourcing trends across the public sector. These studies constitute the sum total of institutional theory's application in public procurement research. Looked at from the other side, institutional theorists have all but neglected public procurement as a research context. Given the heavily institutionalised character of public procurement, as well as its economic significance, this is remarkable and something that needs to be righted (Flynn and Davis, 2014).

2.3.3 Scientific validity

Justification for using institutional theory is also to be found in its scientific validity. Institutional theory has undergone a renaissance over the last three decades and

currently enjoys a high profile in organisation studies. Proof of these developments, the percentage of institutional-related articles published in top tier journals climbed from four per cent in 1984 to fourteen per cent in 2007 (David and Bitektine, 2009). Institutional theory has, in the estimation of Tolbert and Zucker (1996), become institutionalised in management science. As a theory it has reached ‘adulthood’ and many of its original assumptions have been revised to reflect empirical realities (Scott, 2008a, 2008b). It is now accepted that institutional forces in the form of regulations and policies are not as deterministic as initially thought (Scott, 2005), and that change is as much a part of institutional environments as stability (Dacin, Goodstein and Scott, 2002; Hoffman, 1999). Far from undermining institutional theory, these revisions have proved a necessary corrective to its earlier limitations and have enhanced its ability to explain and predict the impacts of institutional pressures on individuals and organisations (Scott, 2008a). The prestige of institutional studies stands in contrast to the relatively peripheral status of research on SME-friendly procurement¹⁷. It is hoped that the application of institutional theory here will go some way towards bolstering the scientific underpinnings and raising the profile of the latter. What institutional theory is about is dealt with in the next section.

2.4 An overview on institutional theory

‘The beginning of wisdom in approaching institutional theory is to recognise at the outset that there is not one but several variants’ (Scott, 1987:493). As Scott and esteemed institutional theorists like Powell and Di Maggio (1991, Introduction) and Tolbert and Zucker (1996) have acknowledged, the meaning of institutional theory

¹⁷ Institutional-related research features prominently in 5* journals, including *Administrative Science Quarterly*, *Academy of Management Review* and *Academy of Management Journal*. Research at the intersection of SMEs and public procurement tends to be found in lower ranked, niche journals.

alters depending on the disciplinary context in which it is being used. How institutional theory is understood and applied in political science is different to that in economics and different again to management science and the sociology of organisations. Its meaning and usage in an organisational context is solely of interest here. In this section an overview of institutional theory is provided. It begins in section 2.4.1 by setting out the tenets of institutional theory – what it explains and predicts about organisational practice. If theories are statements of relationships between empirical phenomena (Bacharach, 1989), institutional theory is a statement of relationships between institutional forces and organisational practices. As with many theories, the initial assumptions of institutional theory have been subject to critique and revision. Section 2.4.2 identifies the main points of critique – underestimating human agency and pre-supposing institutional balance - and presents institutional theory in its revised form. What this means for compliance with SME-friendly procurement policy is then addressed in section 2.4.3.

2.4.1 Institutional theory: explanation and prediction

Institutional theory draws attention to the role of the institutional environment in influencing the behaviour of individuals and organisations. The primary actors or ‘authoritative organisations’ shaping the institutional environment in modern society is government and professional representative bodies (Di Maggio and Powell, 1983; Hinings and Greenwood, 1988; Scott, 1987). Transnational corporations and non-governmental organisations have latterly been put forward as shapers of their own institutional environments (Suddaby, Greenwood and Cooper, 2007). Institutional theory contends that much in the way of individual and organisational behaviour and practices is explained not by an economic logic or a technical logic, but by an institutional logic (Edelman, 1992; Meyer and Rowan, 1977; Scott, 1983). In other

words, pressures from regulatory agencies and professional bodies determine how individuals and organisations behave. Institutional theory predicts that individuals and organisations conform to institutional pressures, even where there is not always an economic advantage to be had from doing so (Meyer and Rowan, 1977; Zucker, 1977, 1987). The impetus for conformance lies in a desire for social legitimacy (Dowling and Pfeffer, 1975; Meyer, 1979; Parsons, 1956). To conform to institutional pressures is necessary in order to maintain social legitimacy. Not to conform to institutional pressures jeopardises legitimacy. The effect of institutional pressures is to lead organisations to adopt the same practices and outlooks – a process referred to as institutional isomorphism (Di Maggio and Powell, 1983; Scott, 2008b).

2.4.2 Institutional theory: a critique and revision

Institutional theory in its original form assumed that institutional forces were invariably deterministic of organisational practices. This assumption has since been critiqued and revised (see Fig. 6, pg. 95). Firstly, there is now acceptance that organisations and their employees are not passive recipients of institutional forces and do not automatically exhibit compliance. Rather, they can and do engage in purposive, self-interested and politically-oriented behaviour (Di Maggio, 1988). Intra-organisational dynamics in the form of interests, values, power dependencies and capacity for action make it so that organisational actors can exercise choice in how they respond to institutional forces (Greenwood and Hinings, 1996; Oliver, 1988, 1992; Powell, 1991). Supporting this view are recorded cases of groups and organisations exercising power and self-interest in response to the institutional demands made of them (Elsback and Sutton, 1992; Holm, 1995; Oliver, 1988; Scott et al., 2000; Fox-Wolfgramm, Boal and Hunt, 1998). Secondly, there is greater

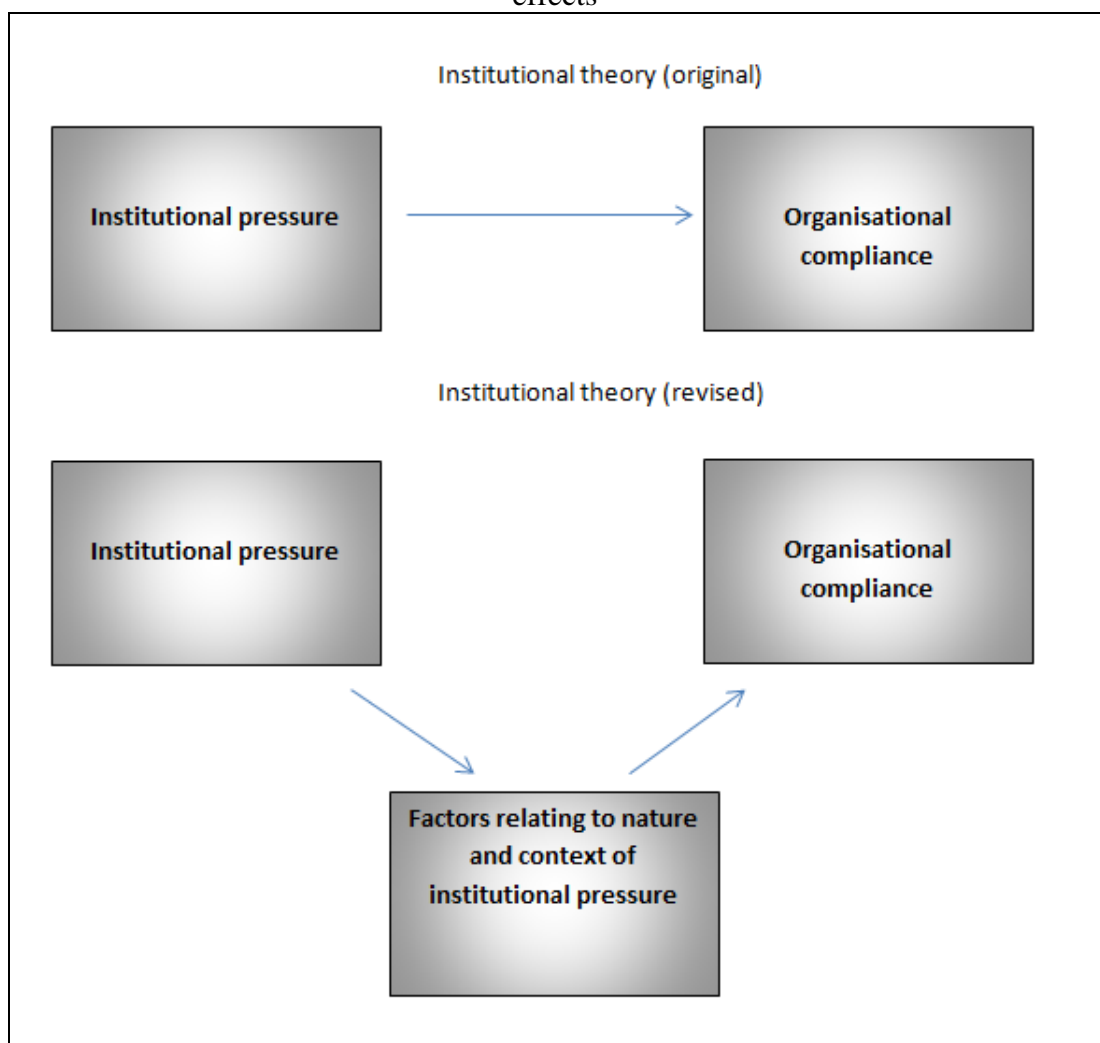
awareness of the often contested and fluctuating nature of institutional environments (Scott, 2005, 2008a). In circumstances where there are conflicting forces at play within an institutional field, the power of any one of these forces to influence organisational behaviour diminishes. Moreover, institutional ambiguity creates the space in which individuals may be able to avoid or even rebuff institutional pressures (Goodrick and Salancik, 1996). These theoretical revisions concerning agency and institutional imbalance lead to a more nuanced depiction of the institutionalisation process; one in which the power of the state to shape organisational practices ultimately depends on the nature and context of the institutional pressures (Oliver, 1991).

2.4.3 Institutional theory: application to this study

Original conceptions of institutional theory assumed that institutional pressures elicited automatic compliance. More recent perspectives see institutional responses as 'behaviors to be predicted rather than theoretically predefined outcomes of institutional processes (Oliver, 1991:174). In its revised form institutional theory is useful for predicting compliance with SME-friendly procurement policy. Across developed economies public buyers and their organisations are under pressure to incorporate SME-friendly policy measures into their procurement practices. Compliance on their part cannot be taken as given, though. As several studies have revealed, what the institutional environment says public buyers ought to do and what they actually do are not always aligned (De Boer and Telgen, 1998, Martin, Hartley and Cox, 1999; Ntayi, Ngoboka and Kakooza, 2013). Organisational actors in procurement have their own interests and values, which may not be coterminous with those of the institutional rule setters (Gelderman, Semeijn and Bouma, 2015). The contention, simply, is that public buyers should not be thought of as conduits for

policy edicts to pass through. As discussed in sections 1.9.2, the institutional environment of public procurement is not without contradictions: facilitating SMEs must compete with cost reduction pressures and supranational laws. All this raises the prospect that individuals at organisational level may be unable or unwilling to comply with SME-friendly procurement policy. Section 2.9 addresses this area in more depth. Before this, sections 2.5-2.8 go into more detail on institutional theory.

Fig. 6 Institutional effects



2.5 Institutionalism

The evolution of institutional theory over the last half century is examined here. It begins in section 2.5.1 by situating institutional theory in its historical context. While institutional theory is synonymous with ideas and terminology put forward by Di

Maggio and Powell (1983), Meyer and Rowan (1977), Scott (1987, 2008b) and Zucker (1977, 1987), its origins belong to an earlier period in organisation theory. As far back as the 1940-50s organisation theorists including Selznick (1948) and Parsons (1956) were starting to tease out how events at the institutional or societal level percolated down to the organisation level. This ‘old institutionalism’ laid the foundations for the emergence of ‘new institutionalism’ in the 1970s. The new institutional thesis is described in section 2.5.2 in terms of what it explains and predicts of organisational practices. It is followed in section 2.5.3 by a synopsis of the empirical body of evidence, which leaves little doubt that institutional forces matter when it comes to explaining what goes on inside organisations. A recognised effect of institutional forces is that organisations end up exhibiting similar-type practices and structural characteristics. The process through which this occurs – isomorphism - is dealt with in section 2.5.4. The final section 2.5.5 discusses the idea of institutional legitimacy and its centrality in explaining the power of institutions to wield their influence.

2.5.1 Institutional theory in historical context

The impact of the institutional environment on organisational behaviour has been a recurring theme since the inception of organisation studies. Over sixty years ago Selznick (1948:25) talked of the organisation as an ‘adaptive social structure’ reacting to stimuli from institutional actors. As he saw it, organisations, as rational systems for the achievement of stated goals, are embedded in a wider institutional environment that has a direct bearing on how they are managed. A similar stance was assumed by Parsons (1956). He modelled the organisation as a social system situated within a superordinate social system. From this perspective the decisions organisations take and the goals they pursue cannot be divorced from their social and

institutional milieu. Later studies were also to make the connection between the institutional environment and organisational practices. Benson (1975) positioned the organisation and its network within the macro environment of state agencies, legislative bodies, media and society. These higher-level forces were understood to exercise power over the flow of resources to organisational networks, the distribution of power among organisations, and the governance of organisations. Zald (1978) saw social forces as critical in shaping the standards and norms that govern industries and Dowling and Pfeffer (1975) spoke of the need for organisational behaviour to embody and reflect social norms. The common thread running through these contributions is the influence of institutional and societal forces, in addition to market forces, in explaining organisational practices and behaviours.

2.5.2 Emergence of 'new institutionalism'

Towards the end of the 1970s a 'new institutionalism' movement emerged, which had its antecedents in the pioneering work of Selznick (1948) and Parsons (1956). 'New institutionalism' eschewed exclusively technical-rationalist interpretations of organisational behaviour. Instead, it directed its attention to the role that institutional forces play in determining organisational structure and practice. Meyer and Rowan (1977) are credited with articulating the 'new institutionalism' thesis. In their watershed paper on 'institutionalised organisations' they argued that the structures, policies and practices of many organisations reflect the prevailing norms of their institutional environments rather than the demands of their work activities. In the same year Zucker (1977) proposed that forces within the institutional environment were causative in terms of the types of behaviours and practices adopted by organisations and their employees. This institutional thesis represented a departure from prevailing thinking in organisation studies. The latter privileged organisation-

centric stances and largely discounted the determining influence of institutional forces (Powell and Di Maggio, 1991, Introduction; Scott, 2008b). ‘New institutionalism’ sought to counter what it believed to be under-socialised views of human action (Granovetter, 1985) and ‘bring society back in’ to analysis of organisational practices (Friedland and Alford, 1991). Under the institutional lens, organisations came to be seen not only as rational wealth maximisers but also as ‘cultural rule followers’ (Edelman and Suchman, 1997).

2.5.3 Empirical support for ‘new institutionalism’

Soon after Meyer and Rowan’s (1977) ‘new institutionalism’ thesis evidence around institutional impacts on organisational behaviour started to emerge. Among the earliest of these empirical studies was Rowan’s (1982) longitudinal examination of education practices in Californian schools. Rowan was able to show that the provision of particular educational services and the undertaking of curriculum reform resulted from regulatory pressures and sector norms rather than organisation size. Also in an education context, Meyer, Scott and Strang (1987) described how changes in the administrative structure of schools were related to regulatory changes and their impact on funding provision. The power of institutional forces in shaping organisational practices was also evident in other industries. Mezas (1990) found that regulators and professional accounting bodies were significant in overhauling financial reporting practices used by large for-profit firms. Dacin (1997) investigated trends in the establishment of Finnish language newspapers across three centuries and concluded that institutional forces were more important than market forces in explaining their founding. Event-history analyses of organisations in the US by Barron, Dobbin and Devereaux-Jennings (1986) and Dobbin and Sutton (1998) demonstrated that changes in employment practices after WWII had their origins in

regulatory activism and normative pressures. These studies typify a vast body of work, which lends empirical support to the thesis that institutional forces shape organisational behaviour.

2.5.4 Institutional isomorphism

Institutional forces provide one answer to the question of why organisations come to display striking similarities in their practices and outward orientations. Institutional forces, as Di Maggio and Powell (1983) pointed out, induce organisations into adopting the same practices and exhibiting the same structural attributes. Through responding to the same institutional cues organisations start to become isomorphic with each other and with their wider environment (Dacin, 1997). Instances of institutional isomorphism have been detected in various contexts. Edelman (1990) linked the diffusion of formal industrial relations grievance procedures to the enactment of 1960s civil rights laws. In a subsequent study, Edelman (1992) demonstrated that innovative firms were the first to adopt grievance procedures, followed by a more universal adoption once the organisational benefits and social legitimacy of these procedures had been established. Westphal, Gulati and Shortell (1997) showed something similar in respect of the adoption of total quality management (TQM) systems in the hospital sector. A small number of innovative hospitals initially embraced TQM for efficiency purposes. Only after TQM became an institutional standard did the majority follow suit, and then for social legitimacy rather than efficiency reasons. Isomorphism has also been used to rationalise the diffusion of reform across the US public sector (Tolbert and Zucker, 1983) and the erosion of permanent employment within Japanese corporations (Ahmadjian and Robinson, 2001). As implied here, social legitimacy is integral to explaining institutional conformity. The next section examines it in more detail.

2.5.5 Institutional legitimacy

Central to the ‘new institutionalism’ thesis is social legitimacy. It is the felt need for legitimacy that is used by theorists to explain why actors conform to institutional pressures (Dowling and Pfeffer, 1975; Meyer and Rowan, 1977; Parsons, 1956; Suchman, 1995). Institutional conformity is said to underscore legitimacy irrespective of the economic or technical effectiveness of the institutional practices. Legitimacy, in turn, helps organisations to secure resources and political support from key stakeholders (Aldrich and Fiol, 1994). The opposite occurs when institutional expectations are openly defied: legitimacy is compromised and stakeholder support may be withdrawn. Findings from a range of studies support this hypothesis. Singh, Tucker and House (1986) found that conferred legitimacy by powerful institutional actors mattered more for the survival of young voluntary social service organisations than internal efficiency. In a similar way, institutional linkages and the legitimacy they bestow have been shown to be decisive in organisational survival for social care providers and hospitals (Baum and Oliver, 1991; Ruef and Scott, 1998). Maintaining social legitimacy has particular salience for organisations operating in environments subject to high levels of state control (Meyer, Scott and Deal, 1983). In these environments legitimacy can be more important than the coordination and control of productive activities in preventing organisational mortality (Meyer and Rowan, 1977; Powell, 1988). The chapter now turns to unpacking the nature of institutional forces.

2.6 Institutional forces

Institutions reside at the heart of institutional theory and so this section takes a closer look at them. The meaning of the term ‘institution’ is interrogated in section 2.6.1. Institutions are shown to be socially constructed rules and modes of behaviour. The function of institutions is clarified in section 2.6.2. Essentially, institutions provide

stability and order to social life by prescribing some forms of behaviour and practices while proscribing others. The guidance function of institutions assumes particular significance when social actors are uncertain over what course of action to embark on. Based on the work of Scott (2008b), sections 2.6.3-2.6.5 distinguish between three manifestations of institutional forces: regulative, normative and cultural-cognitive. Regulative institutions are instantiated in laws and policies. Social actors can be coerced to comply with these institutional pressures under threat of sanction by the state, professional bodies or other rule setters. Normative institutions are associated with professional standards, although they can also encompass wider societal expectations about what is proper and acceptable conduct. Moral obligation rather than coercion is the basis of compliance. The third institution-type is cultural-cognitive. It denotes taken-for-granted assumptions about how things should be done and operates on the basis of shared cultural understandings. Regulative, normative and cultural-cognitive forces are all present to varying degrees in any given institutional field. The section concludes with a reminder that institutions exist only to the extent that social actors reproduce them.

2.6.1 Defining institution

In the middle of the last century Radcliffe-Brown (1940:9) spoke of institutions as standardised modes of behaviour that underpin social structures and networks of social relations. This interpretation of institutions persists to the present day, with particular emphasis placed on their rule-like quality and their ordering function. For Mantzavinos (2011) institutions are normative social rules, which are enforced by the state and the professions. Institutions assume the form of ‘organised, established procedures’ that determine social behaviour (Jepperson, 1991:143) and act as ‘blueprints’ (Dacin, 1997) or ‘archetypes’ (Scott, 2008b) by which individuals and

organisations orient themselves within their environments. Institutions have the property of a ‘rule-like, social fact quality of an organised pattern of action’ and are so pervasive as to be taken-for-granted (Zucker, 1987:728; also: Davis, Diekmann and Tinsley, 1994; Meyer and Rowan, 1977). As will be discussed presently, institutions can be disaggregated into regulative, normative and cultural-cognitive forms. By defining institutions as ‘social rules’ or ‘blueprints’ for how to act in our social environments, we can rule out what institutions are not, namely: organisations. The distinction is important as ‘institution’ is used interchangeably with ‘organisation’ in everyday parlance even though the two are analytically distinct.

2.6.2 Function of institutions

Institutions perform a vital function in the ordering of society and social relations. At the most fundamental level institutions represent solutions to social problems (Mantzavinos, 2011). Institutions ‘define new organizing situations, redefine existing ones, and specify the means for coping rationally with each’ (Meyer and Rowan, 1977:344). They detail not only the ends to which behaviour should be directed, but also the means to the achievement of those ends (Friedland and Alford, 1991). Viewed from this angle, institutions have a directive, controlling influence and represent external constraints on individuals and organisations. They structure choices by providing individuals with ‘vocabularies of motives and with a sense of self’ (Friedland and Alford, 1991:251). ‘Predefined patterns of conduct’ for individuals to follow are embodied in institutions (Berger and Luckmann, 1966:52). Conformance to these patterns of conduct becomes a sense making activity for all institutional actors (Edelman, 1992). Simultaneously, institutions serve to empower social actors (Jepperson, 1991; Scott, 2008b). They are ‘scripts for behavior’ and ‘provide substantive guides for practical action’ (Clemens and Cook, 1999:445). By

proscribing some courses of action institutions actively promote alternative courses of action. This reduces uncertainty by ensuring that actors can follow legitimised routines to deal with familiar and regularly occurring situations (Mantzavinos, 2011). The connotation and ultimate effect of institutions, whether proscriptive or prescriptive, is to provide stability and meaning to social behaviour (David and Bitektine, 2009; Scott, 2008b).

2.6.3 Regulative institutions

Institutions manifest themselves in three main ways according to Scott (2008b). The first institutional manifestation is regulative in form. Regulative institutions emanate from the state and include, inter alia, laws, policies, directives and other instruments of public administration. The underlying mechanism through which regulative institutional forces work is coercion, which can be experienced as either direct force or persuasion (Di Maggio and Powell, 1983). In all cases regulative institutions are legally sanctioned by the state and impose some form of official obligation on parties to comply. As Scott (2008b:53) stated, with regulative institutions the state acts as ‘rule maker, referee, and enforcer’. Regulative pressures are an expression of state power and are intended to promote or prohibit certain types of behaviour within organisations. The institutional literature is replete with cases of regulatory forces effecting change in organisational structure. Baron, Dobbin and Devereaux-Jennings (1986) traced the emergence of personnel departments and specific models of employment to federal regulation in the US. Along similar lines, studies have described how the practices and policies of schools and public sector organisations took shape in response to demands made of them by government departments and agencies (Meyer, Scott and Strang, 1987; Rowan, 1982; Tolbert, 1985; Tolbert and Zucker, 1983).

2.6.4 Normative institutions

The second institution type is normative in form. Normative institutions are primarily associated with advocacy, education and standard setting by professional representative bodies. Included also are the prevailing norms and values in society (Dacin, 1997). In contrast to regulative forces, normative institutions do not operate through coercion. Norms are morally governed and exert their influence by imposing a social obligation on parties to comply (Di Maggio and Powell, 1983). As an example of the power of normative institutional pressures, Greenwood, Suddaby and Hinings (2002) described how over a twenty-year period professional accounting bodies in Canada redefined the role of accountants by lobbying for change, endorsing local innovations and diffusing best practices. Normative institutional pressures can work in concert with legally-binding regulations in shaping organisational practices (Scott, 2008b). Mezas (1990) found that regulatory stipulations and stances adopted by professional accounting bodies each had a part to play in driving the uptake of new financial reporting practices in large corporations. The combination of regulative and normative institutional pressures can bring about shared understandings of appropriate social practices so that they become taken for granted and assume a reality of their own, 'a reality that confronts the individual as an external and coercive fact' (Berger and Luckmann, 1966:55). This leads to the third of the institution types, cultural-cognitive, which is described next.

2.6.5 Cultural-cognitive institutions

As the name suggests, the cultural-cognitive institution refers to cultural beliefs and shared understandings around social behaviour. Whereas the regulative and normative institution types take effect through coercion and norm setting respectively, the cultural-cognitive institution operates through actors mimicking one another (Di Maggio and Powell, 1983). As an institutional pressure it is culturally

supported rather than legally sanctioned or morally governed. The cultural-cognitive institution assumes heightened importance under conditions of environmental uncertainty; for example, when new technologies are introduced or new modes of working come on stream. Mimicking other actors, especially prominent actors perceived to have a high degree of institutional legitimacy and/or marketplace credibility is a coping device for managing uncertainty. Empirical research bears this out. Galaskiewicz and Wasserman (1989) revealed that senior decision makers took their cue in philanthropic decision making from persons whom they affiliated with, knew and respected. Burns and Wholey (1993) found that mimetic forces and normative pressures had explanatory value in rationalising the decision of hospitals to adopt matrix management programs. Mimetic forces were also important in explaining how the multidivisional structure became standard (Fligstein, 1985), as they were in explaining how TQM systems were adopted by hospitals (Westphal, Gulati and Shortell, 1997). In sum, institutions manifest themselves in three main ways, but these are not mutually exclusive and may operate in concert with one another (see Table 9).

Table 9 Institutional forces

	Regulative	Normative	Cultural-cognitive
<i>Mechanisms</i>	Coercive	Normative	Mimetic
<i>Basis of compliance</i>	Expedience	Social obligation	Shared understanding
<i>Basis of order</i>	Regulative rules	Binding expectations	Constitutive schema
<i>Logic</i>	Instrumentality	Appropriateness	Orthodoxy
<i>Indicators</i>	Rules, laws, sanctions	Certification, accreditation	Common beliefs
<i>Basis of legitimacy</i>	Legally sanctioned	Morally governed	Culturally supported

(Scott, 2008b)

2.6.6 Inhabited institutions

The tenor of the discussion so far has been institutional determinism. Powerful as their effects may be, institutions only exist to the extent that they are ‘inhabited by people and their social interactions’ (Hallett and Ventresca, 2006:213). The metaphor of ‘inhabited institutions’ finds resonance in the much earlier observation of Berger and Luckman (1966:57) that ‘the objectivity of the institutional world, however massive it may appear to the individual, is a human produced, constructed objectivity’. Institutions are not ‘disembodied phenomena’, as Covalleski and Dirsmith (1988:582) made clear from their investigation into the implementation and eventual decline of a university budget system. While institutional pressures – be they regulatory, normative or cultural-cognitive – influence behaviour, they still only become real through the actions of those subject to them (Barley, 1986). The result is that organisations and their employees are simultaneously ‘institutional carriers’ and ‘institutional agents’ (Scott et al., 2000). Individuals are ‘institutional carriers’ to the extent that they enact and perpetuate authoritative guidelines, norms and cultural assumptions. Simultaneously, individuals are ‘institutional agents’ insofar as they enjoy some discretion over how they respond to institutional pressures. If institutions provide the guidelines for social interaction, the meanings of institutions are themselves constructed by social interactions (Hallett and Ventresca, 2006:213). The import of this depiction of institutions will become clear in the next section.

2.7 Critiquing institutional theory

In its original form institutional theory understood regulative, normative and cultural-cognitive forces to be highly deterministic of behaviour within organisations: ‘all institutions appear in the same way, as given, unalterable and self-evident’ (Berger and Luckmann, 1966:56). The new institutional movement associated with Meyer and Rowan (1977) that emerged in the 1970s concurred with

this viewpoint. In the years since then scholars have moved beyond assumptions of institutional determinism to something more nuanced and contingent (Di Maggio, 1988; Powell, 1991; Oliver, 1991, 1992; Zucker and Darby, 2005). Scott (2008a:429) has described it as institutional theory making the transition from ‘determinant to interactive arguments’. Two major developments have brought about this shift in thinking. The first is acceptance that individuals and their organisations are capable of exercising agency in the face of institutional demands. As Mills and Murgatroyd (1991) have made clear, organisational actors do not always mirror the social rule system governing them. The second is appreciation that institutional environments are often beset with contradictions and conflicts (Eisenstadt, 1964a). Such institutional flux leaves open the possibility that individuals will evade or defy institutional expectations. These two points are subject to further examination in sections 2.7.1-2.7.2. The section concludes by drawing these points together to provide a more contingent view of the effects of institutional pressures on organisational practices.

2.7.1 Agency

One of the main deficiencies of ‘new institutionalism’ was the insufficient weight it accorded to agency and interest (Di Maggio, 1988; Kraatz and Zajac, 1996). Individuals and organisations were portrayed as passive, without power and beholden to institutional rule setters. More recent empirical insights contradict this assumption and show individuals to be capable of purposeful and self-interested behaviour. The voluntary service organisations in Oliver’s (1988) study exercised a degree of latitude over how they configured their operations despite institutional pressures impinging on them. Greenwood, Suddaby and Hinings (2002) and latterly Greenwood and Suddaby (2006) were also able to show how powerful accounting

firms engaged in 'institutional entrepreneurship' and succeeded in introducing a multidisciplinary practice model of organising that became the new institutional standard. That institutionalisation can be an interactive process between regulatory agencies and firms is also evident in the literature. The establishment and subsequent disbandment of the mandated sales organisation in Norwegian fisheries, as described by Holm (1995), resulted from government agents and the fishing sector alternately influencing one another. A similar dynamic of interaction obtained in Covalenski and Dirsmith's (1988) account of the transformation of a university budgeting system. Depending on the precise context, institutional responses may be 'open to organisational construction' and the attainment of institutional legitimacy need not come at expense of managerial discretion (Edelman, 1992; Edelman and Suchman, 1997).

Part of the problem with 'new institutionalism' was its reification of socially constructed realities (Mezias, 1990). The impression given of institutionalisation was as a 'once-and-for-all-process' (Davis, Diekmann and Tinsley, 1994:550). The deterministic power of institutional forces was over-emphasised while the ability of actors to respond to these same forces was under-emphasised (Hirsch, 1997); a conclusion also reached by Vermeulen, Buch and Greenwood (2007) from their examination of Dutch government efforts to reform the concrete industry. Precisely because individuals have interests and power, institutional pressures are not wholly deterministic. Contemporary institutional perspectives capture this idea. Institutional environments are understood as 'centres of debates in which competing interests negotiate over issue interpretation' (Hoffman, 1999:351); 'arenas of power relations' in which actors hold varying degrees of power (Brint and Karabel, 1991:355); 'sites within which renegotiations of meaning take place' (Aldrich and Fiol, 1994:649);

‘battlefields’ (Reay and Hinings, 2005); and ‘a field of struggles’ in which the rules change through shifting power dynamics (Bourdieu and Wacquant, 1992:101). This actor-centred interpretation is also closer to the politicised nature of institutional environments and the various machinations and manoeuvrings that take place between governments, professional associations and those subject to their influence and control (Di Maggio, 1988; Elsbach and Sutton, 1992; Steinmo, 2008).

2.7.2 Institutional imbalance

‘New institutionalism’ has also received criticism for assuming that institutional environments are monolithic and that governments exert their influence in a unilateral and unrestricted manner (Clemens and Cook, 1999; Scott, 2005; Zucker, 1988). Early in the life of ‘new institutionalism’ Meyer and Scott (1983) conceded that what they called the ‘legitimizing theory’ of the organisation is sometimes riven by competing institutional pressures at local, national and federal levels. Others were also to note the ‘conflicts, contradictions, and ambiguities’ inherent in the creation and implementation of institutional arrangements (Powell and Di Maggio, 1991:28, Introduction). Meyer, Scott and Strang (1987) highlighted how institutional fields are often fragmented owing to the presence of multiple regulative, normative and cognitive forces. There can also be more than one institutional logic or ruleset for an organisational field at any given time period (Purdy and Gray, 2009). As one example, D’unno, Sutton and Price (1991) documented how drug treatment centres were forced to selectively respond to the conflicting demands of two major stakeholders in order to maintain their funding and institutional legitimacy. It is under conditions of institutional conflict that the ability and willingness of actors to conform to institutional pressures start to unravel. Gaps between ‘institutional templates’ and the daily demands of organisational life can also start to open up

(Barley, 1986). In more extreme situations, conflicting institutional pressures may even lead to organisational paralysis and disbandment (Pache and Santos, 2010).

A conflicted institutional environment has implications for actor agency. Scott (2005) noted that institutional imbalance creates space for individuals to engage in self-interested, strategic behaviour. Seo and Creed (2002) espoused the same view, suggesting that the combination of institutional contradictions and human praxis can lead to the formation of alternative practices and behaviours at organisational level. Empirical support for this position can be found across a number of studies. Results from Goodrick and Salancik's (1996) investigation of patient care practices supported the hypothesis that organisational discretion takes effect when institutional standards are uncertain, but is constrained under conditions of institutional certainty. Rowan (1982) inferred from his analysis of the diffusion of civil service reform practices that institutional consistency is a pre-condition of organisational compliance. The same argument can be applied to situations where conflicts arise between institutional legitimacy and organisational efficiency. Fox-Wolfgramm, Boal and Hunt (1998) described how banks rebuffed regulatory pressures aimed at overhauling lending practices when they were deemed to be inconsistent with, or superfluous to, their organisational identity. Conflicted institutional environments not only increase the probability of individual resistance to institutional pressures; they also make it more likely that actors feel empowered to introduce new institutional standards (Eisenstadt, 1964a, 1964b). Instances of this happening have been documented in such diverse areas as corporate structuring (Davis, Diekmann and Tinsely, 1994), recycling (Lounsbury, Ventresca and Hirsch, 2003) and radio broadcasting (Leblebici et al., 1991).

2.7.3 A contingent view of institutional effects

The above critique of ‘new institutionalism’ yields two key points. The first is that individuals are more animate under institutional pressures than ‘new institutionalism’ gave them credit. The second is that institutional environments are not always coherent, and this creates the space for various types of non-conformance. These two observations do not invalidate the contention that regulatory pressures, industry norms and shared cultural understandings are significant in influencing organisational practices (Oliver, 1988). What they do suggest is a more qualified take on institutional determinism. This more qualified stance helps to avoid the extremes of under or over-socialised views of human action in organisational contexts (Granovetter, 1985; Powell, 1991). Tacking to this line is consistent with the view expressed by management scholars many times over that both institutional pressures and strategic choice influence what happens within organisations (Aldrich and Pfeffer, 1976; Greening and Gray, 1994; Greenwood and Hinings, 1996; Hrebiniak and Joyce, 1985; Judge and Zeithaml, 1992; Selznick, 1996). Equally, it resonates with Van de Ven’s (1983) concept of ‘reasonable’ administrative behaviour on the part of organisational members, which is neither purely rational nor purely random. Pragmatism, as opposed to automatic compliance or unilateral resistance, is the logic of action for most actors in negotiating their institutional environments (Seo and Creed, 2002). This more contingent view of institutional effects is taken up another level in section 2.8.

2.8 Predicting institutional responses

As asserted in section 2.7, there is now acceptance among institutional theorists that individuals are not always able or willing to respond positively to institutional pressures, particularly under conditions of institutional imbalance. As a corollary, institutional pressures cannot be said to be deterministic in all circumstances. This is

the starting premise used by Oliver (1991, 1992) in predicting how actors respond to institutional pressures. For Oliver institutional conformity is only one of five possible response strategies. The other four are avoidance, compromise, manipulation and outright resistance. Subsequent empirical work supports her position, finding that institutional responses range across a defiance-conformity spectrum (Bigelow and Middleton-Stone, 1995; Goodstein, 1994; Ingram and Simons, 1995; McKay, 2001). The response exhibited, whether it is conformity, avoidance, resistance or something else, is believed to be contingent on the nature and context of the institutional pressures. In this regard Oliver (1991) proposes a number of factors relevant to predicting responses, all of which are grounded in institutional theory. These factors relate to the rationale for compliance with institutional pressures, the institutional context, the content of the institutional pressure, and the means by which the institutional pressure exerts itself on individuals and organisations¹⁸. These four areas are examined in sections 2.8.1-2.8.4 below.

2.8.1 Rationale for institutional compliance

The rationale for compliance is the first of the four dimensions for predicting how people respond to institutional pressures. Oliver (1991) breaks this down further into two components: social legitimacy and economic efficiency. As already discussed, securing and maintaining social legitimacy is central to institutional explanations of why individuals comply with the demands made of them by government agencies and professional associations (Meyer, 1979; Meyer and Rowan, 1977; Dowling and Pfeffer, 1975). The legitimacy connotations stemming from institutional pressures

¹⁸ Oliver (1991) also sees the environmental context within which institutional pressures are being exerted as a predictive dimension. As this study limits itself to the public sector it is not given any further consideration here.

are not the same in all cases. Some institutional pressures are imbued with high levels of legitimacy. Their impact on social standing is likely to be substantial. Other institutional pressures are imbued with lower levels of legitimacy and have a corresponding lower impact on social standing. Where actors at the organisation level perceive institutional pressures to be integral to their legitimacy and reputational status, then compliance is to be expected. Illustrative of this scenario, Deephouse (1996) described how commercial banks adopted certain strategic postures primarily to reassure financial regulators and media commentators of their corporate rectitude and risk management capabilities. Not to have done so would have jeopardised their marketplace credibility and, from this, their ability to trade. Where there are doubts over the social legitimacy of an institutional demand, the probability of compliance reduces. It was under such circumstances that the corporations in McKay's (2001) study showed themselves to be reluctant to adhere to environmental protection legislation.

As well as social legitimacy, there is also an economic-efficiency logic that guides actors' calculus in responding to institutional pressures (Meyer and Rowan, 1977). This stems from the fact that organisations operate in both institutional and economic environments. The relative influence of each environment on organisational behaviour varies across sectors (Meyer, Scott and Deal, 1983; Powell, 1991). Institutional pressures that are associated with some form of economic gain for the organisation are likely to induce a high degree of compliance. Economic benefits serve to incentivise institutional compliance and make it worthwhile not only in a social legitimacy sense but also in an instrumental sense. In effect, they reinforce the social fitness aspect of institutional compliance. As an example, the perceived organisational benefit of family-friendly work practices was found by Goodstein

(1994) to be among the significant predictors of compliance with this government-led initiative. The opposite effect is predicted to occur where there is no obvious economic or technical-efficiency advantage to be had from complying with institutional pressures. That is, in the absence of an economic incentive, motivation to comply weakens. Responses may range from compromise and avoidance to manipulation and rejection depending on the economic cost to the organisation of incorporating the institutionally-sanctioned change into their everyday practices (Bigelow and Middleton-Stone, 1995).

2.8.2 Institutional context

The second predictive dimension of Oliver's (1991) framework relates to institutional context. Two factors are relevant here. The first of these is the coherence of the institutional order or ruleset. The ability of governments and professional associations to influence organisational practices presupposes a high degree of institutional consistency (Meyer, Scott and Strang, 1987; Rowan, 1982). In reality, institutional environments are not always consistent in their rules or in the demands they make of individuals and organisations. That environments may have more than one institutional rule setter is often the case – several government agencies and departments regulating a particular industry, for example. When this happens the institutional environment can fragment and the ability of institutional pressures to determine practices within organisations starts to diminish (Clemens and Cook, 1999; Galvin, 2002; McKay, 2001; Meyer and Scott, 1983; Purdy and Gray, 2009). On this basis consistency between the rules structuring an institutional field is considered to be a predictor of compliance. Where institutional rules are consistent and not mutually exclusive, compliance is at least possible. The relationship starts to breakdown when the institutional environment is characterised by uncertainty and

ambiguity (Goodrick and Salancik, 1996). Individuals may be unable to signal institutional compliance, even where their willingness to do so is not in question (D'ahunno, Sutton and Price, 1991).

The dependency relationship between rule setters and organisations is also predicted to have a bearing on compliance. Observed elsewhere, the level of dependency on the state or other institutional actors varies by organisation and by sector (Brint and Karabel, 1991; Dawson, 1996; Reay and Hinings, 2005). Some categories – public sector organisations, for example – have a relatively high dependence on the state; although even within the public sector organisation dependence on government is not uniform (Doyle, 2001). Other categories, such as privately-owned firms, are much less reliant on the state. With different levels of resource and mandate dependency come different expectations over how organisations should behave and orient themselves in their institutional environments (Gottfredson and White, 1981; Tolbert, 1985). Organisations with high institutional dependence will find it difficult to resist the demands made of them. Their continued existence is heavily dependent on reciprocity and trust with their institutional sponsor. Non-compliance with regulations, policies and norms jeopardises not only their social legitimacy but also resource flows and budget allocations (Dowling and Pfeffer, 1975). Organisations with lower levels of institutional dependence will experience less pressure to be compliant (Hinings and Greenwood, 1988). They also have comparatively less to lose in resource terms from non-conformance. Organisational dependence on the institutional rule setter is, therefore, understood to be a predictor of compliance.

2.8.3 Content of institutional pressures

The content of the institutional pressure is the third predictive dimension of compliance. Again, this is disaggregated into two factors by Oliver (1991).

Compatibility of institutional pressures with organisational goals is the first factor. Where there is compatibility organisations should encounter few problems in giving effect to institutional prescriptions. Moreover, their policies and goals stand to be buttressed by embracing the institutional standard. Institutional pressures are not always compatible with organisational goals, as has been shown across a number of studies (Fox-Wolfgramm, Boal and Hunt, 1998; Hoffman, 1999). In these circumstances organisations might seek to buffer their core activities from institutional forces (Meyer and Rowan, 1977; Weick, 1976). Among reported cases of buffering, Westphal and Zajac (1994) revealed how, consistent with industry norms, corporations officially adopted long-term incentive plans for their chief executive officers, but never enacted them in practice. 'Ceremonial conformity' of this kind is often necessary to deflect capricious institutional demands and to make sure that organisational operations are not adversely affected by them (Meyer and Rowan, 1977). This leads to the prediction that where institutional pressures complement organisational goals, compliance with them is likely. Alternatively, incompatibility between external pressures and internal priorities increases the prospect of institutional non-compliance.

In addition to compatibility with organisational objectives, the constraining effect of institutional pressure is another salient factor in predicting compliance. Institutional pressures are constraining to the extent that they prescribe how actors should behave in their social environments. They are the 'blueprints' for action (Dacin, 1997) and 'legitimised conventions' (Jepperson, 1991) for actors to follow. By their very nature, institutions channel organisational behaviour 'in one direction against the many other directions that would theoretically be possible' (Berger and Luckmann, 1966:52). Against this, organisational actors strive to retain autonomy over their

decision making processes and preserve their identity (Mills and Murgatroyd, 1991). These same attributes underpin the ability of actors to remain flexible and adaptable for future challenges and opportunities (Seo and Creed, 2002). Critically, they also enable organisations to tailor their policies and practices to the idiosyncratic demands of their operating environments. It was on this basis that Rowan (1982) and Meyer, Scott and Deal (1983) found schools to be selective over how they incorporated institutionally prescribed education initiatives into their curricula. For the aforementioned reasons constraints on discretion and autonomy associated with institutional demands are understood to have a bearing on compliance. Low constraints increase the chances of compliance whereas high constraints do the opposite.

2.8.4 Control mechanisms

The mechanisms through which institutional pressures exert control represent the fourth and final predictive dimension. The two factors relevant to control are the coerciveness of the institutional pressure and the extent to which it is diffused throughout the organisational field (Oliver, 1991). Implied by their name, coercive forces are legally sanctioned and embody the power of the state or other institutional rule setters to dictate organisational behaviour (Di Maggio and Powell, 1983; Scott, 2008b). In various ways the institutional literature makes the connection between coercion and how actors respond to external stimuli. Cook et al., (1983) envisaged organisational response to regulatory pressures as a function of the scope of regulation, its restrictiveness, its duration and the uncertainty created by it. Campbell (2007) postulated that the scope of state regulation, in addition to industrial self-regulation, monitoring and normative pressures cause organisations to behave in socially responsible ways. The coercive power behind an institutional pressure is

considered to be a predictor of compliance. Where institutional pressures are understood to be coercive i.e. enforceable and backed up by the threat of sanction, compliance is likely to be forthcoming (Scott, 2008b). Compliance is less likely where institutional pressures are not seen to be coercive.

Coercion is not the only means through which institutionally-derived practices become embedded in organisational practice. Institutional forces also take effect when actors model their behaviour on what others around them are doing (Di Maggio and Powell, 1983). By this mimicking process practices and structural configurations are diffused along organisational and professional networks (Scott, 2008b). The institutional literature is replete with instances of organisations replicating the behaviours of others, whether in respect of organisational structure (Fligstein, 1985), corporate philanthropy (Galaskiewicz and Wasserman, 1989) or TQM (Westphal, Gulati and Shortell, 1997). The diffusion of new institutional norms and practices across industries generates its own momentum. As greater numbers of organisations adopt a practice it becomes more widely diffused and visible. A point is eventually reached at which the practice becomes institutionalised (Tolbert and Zucker, 1996). The more diffused a practice is throughout an organisational field the more likely it is that actors will be swayed to copy it. Separate studies on family-friendly work practices by Goodstein (1994) and Ingram and Simons (1995) prove this to be the case. Conversely, low rates of diffusion remove a subtle yet powerful driver of institutional conformance.

2.9 Predicting responses to SME-friendly procurement policy

Four dimensions of institutional compliance are described in section 2.8. These same dimensions will now be used to predict compliance with SME-friendly procurement policy (see Fig. 7, pg. 131). Consistent with current institutional perspectives,

automatic compliance with SME-friendly procurement policy is not pre-supposed. Responses are understood to be contingent on the rationale for compliance, the institutional context, the content of the institutional pressure, and the institutional control mechanisms at play (Oliver, 1991). Each of these aspects will be discussed in turn. Section 2.9.1 sets out the rationales for compliance. These are the social legitimacy connotations of facilitating SME suppliers and the economic benefits of having more SMEs compete for public sector contracts. Section 2.9.2 examines how the institutional context of public procurement influences compliance. Relevant here is consistency between institutional rules governing public procurement as well as organisational dependence on the state. Section 2.9.3 focuses on the content of SME-friendly policy in terms of its compatibility with organisational goals and its effects on professional discretion. The fourth section 2.9.4 concentrates on the control mechanisms behind SME-friendly policy. The first of these is coercion and the second is perceptions around what other actors are doing to facilitate SMEs. The final section 2.9.5 looks at interactive effects between institutional factors and individual and organisational characteristics, and how these impact policy compliance.

2.9.1 Rationale for compliance with SME-friendly policy

Social legitimacy is the first rationale for complying with SME-friendly policy. Public buyers who perceive the SME-friendly agenda in public procurement as having direct implications for their reputation and professional credibility will be more inclined to exhibit policy compliance. Increasingly, the facilitation of SMEs has come to have legitimacy connotations for public procurement actors. In political and policy discourse maximising the number of SME suppliers is inextricably linked to the national economic interest and the common weal. Discussed in detail in

chapter one, public sector contracts represent opportunities for small firms to grow and professionalise (Bovis, 1996; Erridge, 1998; Loader, 2005). SME growth and professionalisation, in turn, yields positive externalities for the rest of society, including the creation of employment and the strengthening of local and regional economies. The innovativeness, export activity and contributions to GVA of a buoyant SME sector also underpin national economic competitiveness. Further legitimacy connotations stem from the fact that SMEs have been historically under-represented as suppliers in the public sector marketplace (Anglund, 1999). Taking action to encourage their participation now can be seen as a means of redressing this inequity and delivering a fairer, more transparent and publicly accountable tendering system; all of which is consistent with the expectations of government and other external stakeholders on how public procurement should be managed. This gives the following hypothesis:

H1a: The social legitimacy attached to facilitating SMEs in contract competitions has a positive impact on policy compliance

Economic gain is the second rationale for complying with SME-friendly procurement policy. Research has already shown that economic gains can have a positive effect on compliance with EU Procurement Directives (Gelderman, Ghijsen and Schoonen, 2010) and on the adoption of environmentally-friendly purchasing practices (Walker, Di Sisto and McBain, 2008). The same relationship is expected to obtain in the case of facilitating SMEs. Where SME involvement in tendering competitions is predicted to result in economic gains for the organisation, policy compliance is more likely to come about. Having more SMEs tender for contracts helps organisations to achieve financial savings directly and indirectly. Directly, SMEs are capable of rivalling large firms in offering value for money (Office of

Government Commerce, 2003). Indirectly, their involvement in tendering intensifies competition and leads to more competitive bid prices for the purchasing organisation (European Commission, 1990, 1992; Europe Economics, 2004, 2011). As with the goal of supporting small suppliers, optimising value for money in public procurement has taken on added urgency in the aftermath of the 2007 financial crisis (Dimitri, 2013). Among the effects of the ‘recession dividend’ is that public sector organisations are under pressure to find savings across their span of operations. Procurement is no exception. Therefore, any procurement initiative that is capable of delivering financial savings to public sector organisations, at the same time as fulfilling expectations around facilitating small suppliers, is more likely to be acted on. This gives the following hypothesis:

H1b: Economic gains from facilitating SMEs in contract competitions has a positive impact on policy compliance

2.9.2 Institutional context of public procurement

Consistency among the goals and policies governing public procurement is predicted to affect compliance with SME-friendly policy. As well as facilitating SMEs, public buyers face pressures from government to optimise value for money, referred to above, and to abide by national and international procurement laws. These demands are not necessarily consistent and adherence to one can, in some cases, make adherence to one or more others difficult. Value for money pursued through exploiting economies of scale *de facto* excludes SME involvement in public contracting (Loader, 2011; Morand, 2003; Smith and Hobbs, 2001). Regulatory rules predicated on the primacy of open competition, as is the situation in the EU, prevent public buyers from privileging SME suppliers over larger firms (Fee, 2002). This does not mean that value for money, regulatory compliance and facilitating SMEs are mutually exclusive. In-depth case studies by Erridge (2007) and Erridge and

Hennigan (2012) confirm that public contracts can be leveraged in support of socio-economic goals without compromising value for money or legal obligations. The kernel of the matter is whether public buyers believe that reconciling these goals is practicable given their particular circumstances. In the absence of perceived conflicts, compliance with SME-friendly procurement is more likely to be forthcoming. The opposite is predicted where public buyers perceive conflict between facilitating SMEs and the other two institutional pressures. This gives the following hypothesis:

H2a: Perceived consistency between SME-friendly policy, value for money and EU procurement law has a positive impact on policy compliance

Organisational dependence on the institutional rule setter in public procurement – the legislative and executive arms of the state - is also relevant in predicting compliance with SME-friendly policy. Organisational dependence is not uniform in the case of public sector organisations. This is because the public sector is not homogeneous but differs on the dimensions of autonomy, goals, mandate and financial independence (Bovaird and Loffler, 2009; Doyle, 2001). Public sector organisation categories such as semi-state corporations enjoy relative autonomy. Central government departments and local government authorities have less autonomy than the former and are subject to greater public and political accountability. Public sector organisations are also heterogeneous as to their goals and mandates: some operate along semi-commercial lines while others exist solely to provide social services. Relatedly, there are differences in the extent to which public sector organisations are dependent on government for their operating budget. Proximity to the state and resource dependence has direct implications for management of procurement. Close proximity and high resource dependence is likely to bring about policy compliance. Supportive

of this position, Blount and Hill (2015) returned partial support for the hypothesis that proximity to the institutional rule setter predicted the level of conformity to supplier diversity initiatives in the state of Ohio. Distance from the institutional rule setter and lower resource dependence mean that institutional pressures are felt less strongly (Burns and Wholey, 1991). The compulsion to be institutionally compliant reduces accordingly. This gives the following hypothesis:

H2b: Organisational dependence on the state has a positive impact on policy compliance

2.9.3 Content of SME-friendly policy

The extent to which facilitating SMEs is compatible with existing organisational procurement practices is also anticipated to influence compliance behaviour. Legislators have become increasingly proactive in promoting SMEs' interests in public procurement (Loader, 2013). This reflects increased awareness of how public procurement can be leveraged in support of the SME competitiveness agenda. Political conceptions of the role of public procurement and whose interests it should serve do not necessarily reflect organisational realities (Gelderman, Semeijn, Bouma, 2015; Matthews, 2005). For some public sector organisations there is a *prima facie* fit between facilitating the broadest participation of firms in contract competitions, particularly SMEs, and their own procurement policies and corporate goals. In the case of local government authorities, for example, encouraging SMEs to compete for business opportunities is coincident with their mandate to foster economic development at the local-regional level and to support social cohesion (Murray, 1999, 2001b). Procurement staff will take their behavioural cues from these embedded values and company policies (Hawkins, Gravier and Powley, 2011). For other types of public sector organisations, such as those with a quasi-commercial focus, the inclusion of small and atypical suppliers in contract competitions is not as

evidently compatible with their remit and objectives (Pickernell et al., 2011). Facilitating SMEs may even confound established purchasing strategies and business prerogatives; for example, where the emphasis is on rationalising the supply base and maximising cost savings through aggregating procurement spend (Loader, 2010). This gives the following hypothesis:

H3a: The compatibility of SME-friendly policy with the existing procurement goals of the organisation has a positive impact on policy compliance

As well as compatibility with organisational goals, the impact that facilitating SMEs has on professional discretion is expected to affect policy compliance. SME-friendly policy represents a concerted attempted on the part of the state to change procurement behaviour (Procurement Innovation Group, 2009). It rules in practices designed to make it easier for small firms to identify, access and compete for public sector contracts and rules out practices believed to inhibit SME participation. SME-friendly policy is about making sure that a standard set of best practices in tendering is adhered to across the public sector. It is a ‘one-size-fits-all’ policy and its effects are likely to be experienced differently across the public sector. To the extent that it is compatible with the existing work practices and goals of a public buyer, it is less likely to be interpreted as a constraint. Some might even see it as providing positive guidance over how to navigate the marketplace, which is the whole point of institutions (Mantzavinos, 2011). Compliance should be forthcoming as a result. Where SME-friendly policy jars with the established practices and goals of a public buyer, it is more likely to be viewed as a constraint on professional discretion. Under such circumstances public buyers are more likely to resist it. This gives the following hypothesis:

H3b: Constraints on professional discretion associated with SME-friendly policy have a negative impact on compliance

2.9.4 Control mechanisms associated with SME-friendly policy

SME-friendly policy constitutes a regulative force bearing on public buyers and their organisations. It is state sanctioned and carries the imprimatur of the legislature. Furthermore, it is codified and there is an explicit point of reference to guide behaviour and to subsequently assess compliance (see, for example, Department of Finance, 2010). The threat of sanctions or some form of official reprimand for non-compliance is implied by it. Unlike EU Public Procurement Directives, SME-friendly policy is not legally binding, however (Bovis, 1998; Kidalov and Snider, 2011; McGovern, 2011). Elsewhere it has been shown that the perceived coerciveness of both organisational and national procurement policies fosters compliance. Gelderman, Ghijsen and Schoonen (2010) reported that the severity of sanctions boosted compliance with EU Public Procurement Directives. Mwakibinga and Buvik (2013) found that sanctions and monitoring individually predicted compliance rates with national procurement rules. Enforcement action and increased penalties for transgressions were also identified by Sang and Mugambi (2014) as promoting procedurally correct buying practices. The evidence is suggestive of the coerciveness of procurement rules and policies leading to compliance, although non-significant findings on the relationship between reward-sanction systems and the incidence of ‘maverick buying’ have also been returned (Karjalainen and von Raaij, 2011). This gives the following hypothesis:

H4a: Coerciveness of SME-friendly procurement has a positive impact on policy compliance

Coercion is not the only mechanism through which SME-friendly procurement policy exerts its influence. The degree to which SME-friendly practices are

perceived to be diffused throughout the population of public buyers is also germane in accounting for compliance. There is a substantial literature showing that as practices across public sectors domains like the arts, education and healthcare become more prevalent, individuals and their organisations are more likely to adopt them where they have not already done so (Burns and Wholey, 1991; Di Maggio, 1983; Meyer, Scott and Deal, 1983; Rowan, 1982; Scott et al., 2000; Sherer and Lee, 2002; Tolbert and Zucker, 1983). Added to this body of work is evidence that mimetic behaviours are central to explaining the proliferation of sustainable purchasing practices across organisations (Sancha, Longoni and Gimenez, 2015). Mimetic behaviours are also applicable to explaining SME-friendly practices in public procurement. Where public buyers perceive that the majority of their peers are implementing these practices, it is anticipated that they will take this as their cue to exhibit similar-type behaviours. This can happen even where the instrumental or technical-efficiency grounds for doing so are not altogether obvious. Conversely, a perception that SME-friendly procurement practices are not widely diffused, and hence not part of the established institutional rules of the game, is assumed to have the opposite effect. This gives the following hypothesis:

H4b: The perceived diffusion of SME-friendly procurement practices has a positive impact on policy compliance

2.9.5 Moderating effects and SME-friendly policy compliance

The effect of institutional pressures on procurement practices and behaviours can be moderated by organisation variables (Hoejmosse, Grosvold and Millington, 2013; Sancha, Longoni and Gimenez, 2015; Zhu, Sarkis and Lai, 2013). Consideration is given here to three such moderating effects in explaining policy compliance. The first is between social legitimacy and procurement experience. It is reasoned that the legitimacy connotations of being seen to facilitate SMEs increase with the number of

years spent working in procurement. Arguably, safeguarding professional reputation and maintaining a sense of social legitimacy has greater salience for individuals with a longer tenure in public purchasing. Having built their reputation, experienced public buyers stand to lose more from evading institutional standards. The expectations from organisational stakeholders that experienced public buyers will be able and willing to exhibit institutional compliance with SME-friendly procurement policy will also be higher. Social legitimacy is less salient in the case of individuals who are in the formative stages of their public service careers. They will still be in the process of establishing their profile and credentials as public buyers. Their visibility to organisational stakeholders will not be as great as their more experienced counterparts, which comes with a concomitant reduction in expectations surrounding them. Early stage public buyers are also likely to be more concerned with augmenting their knowledge and skillset in purchasing. This gives the following hypothesis:

H5a: Procurement experience positively moderates the relationship between the social legitimacy attached to facilitating SMEs in contract competitions and policy compliance

The second moderating effect is between the perceived diffusion of SME-friendly practices and procurement involvement. The contention is that the effect of peer behaviour on policy compliance is amplified when individuals spend most or all of their time on procurement-related activity. Full-time procurement professionals or those for whom procurement constitutes a significant part of their role are more likely to be aware of, and have a vested interest in conforming to, industry trends. They will also be more sensitive to the behaviours and initiatives of other public buyers, including what they are doing to accommodate SMEs. Where these other

public buyers are well regarded and held in high professional esteem, their actions are more likely to be copied and replicated by their peers. Di Maggio (1983) used this same logic in linking the professional activism of arts administrators to their knowledge of industry developments and appreciation of how their contemporaries were positioning themselves. By contrast, individuals for whom procurement is ancillary to their main work role – a school principal, for example – will be less attuned to procurement trends, less aware of what others around them are doing, and have less of a professional interest in copying their behaviour. As such, they will be less susceptible to mimetic forces driving SME-friendly procurement. This gives the following hypothesis:

H5b: Procurement involvement positively moderates the relationship between the perceived diffusion of SME-friendly practices and policy compliance

The third moderating effect is between the coerciveness of SME-friendly policy and organisation size. Within institutional scholarship attention is paid to organisation size and its role in conditioning responses to regulatory pressures. One perspective is that because larger organisations have greater public exposure they are under more pressure to conform to the expectations of the institutional rule setters (Greening and Gray, 1994; Scott, 2008b). An alternative perspective is that larger organisations are capable of buffering their internal operations, including procurement practices, from external control influences. Blount and Hill (2015) revealed that organisation size, measured in terms of the available budget, had a negative effect on compliance with an executive order for public agencies to award more contracts to minority business enterprises. Outside the procurement domain, Sherer and Lee (2002) found that the size of legal firms was also negatively related to institutional conformance on the question of adopting certain human resource management practices. Large

corporations are even known to bend institutional standards and norms to suit their own strategic interests (Greenwood and Suddaby, 2006; Suddaby, Greenwood, and Cooper, 2007). For this study, the latter interpretation suggests that the large size and relative power of some public sector organisations will dampen the coercive effect of SME-friendly procurement policy. Smaller public sector organisations will be less able to insulate their operations from the demands of institutional environment. Hence, a more linear relationship is expected between coercion and policy compliance in their case. This gives the following hypothesis:

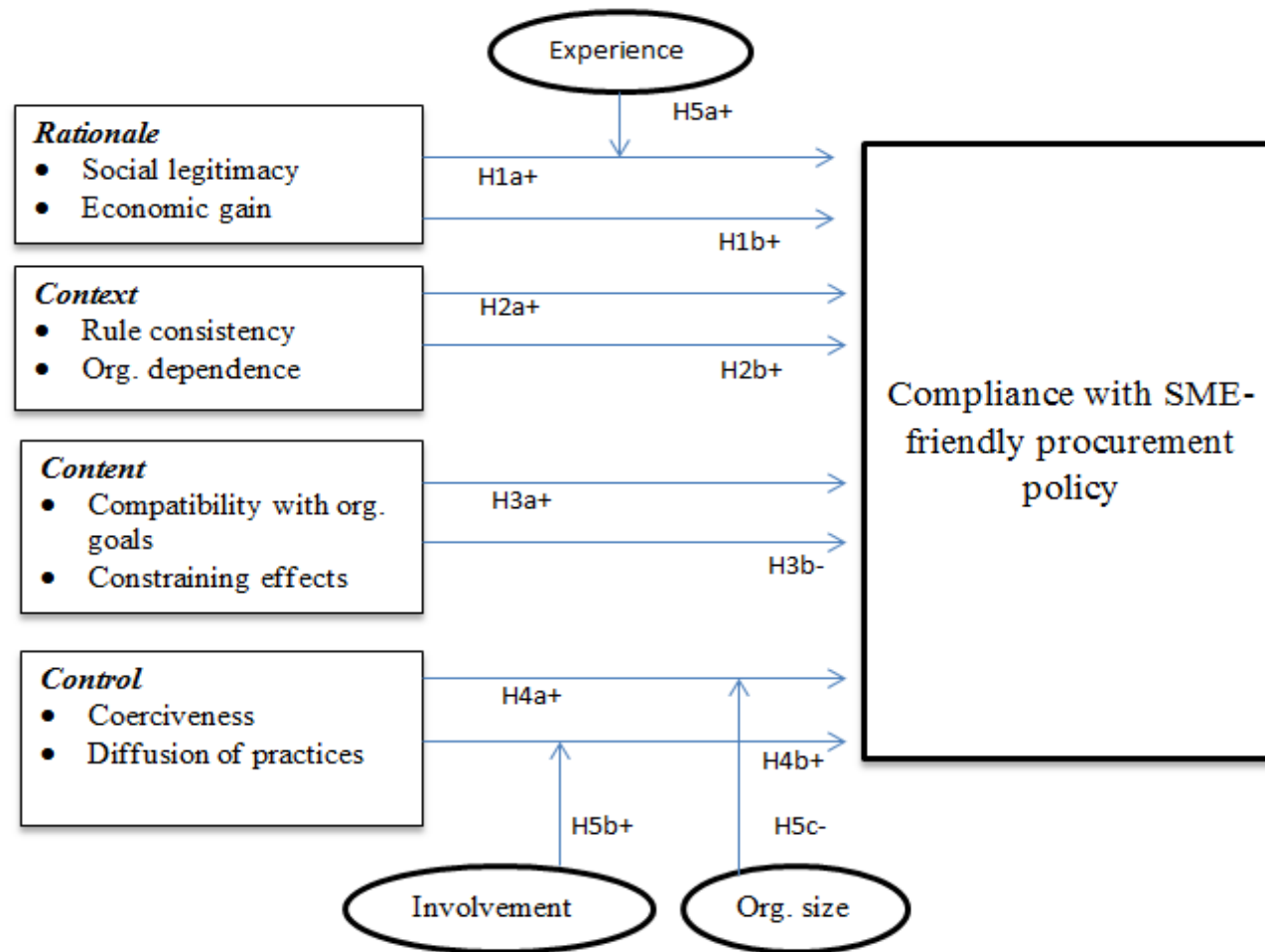
H5c: Organisation size negatively moderates the relationship between the coerciveness of SME-friendly procurement and policy compliance

2.10 Conclusion

Theories help us to explain and predict our social phenomena of interest. The phenomenon of interest in this study is compliance with SME-friendly procurement policy and the theory selected to shed light on it is institutional theory. Institutional theory has much to say on the way in which policy pressures impact organisational practices, and the conditions under which policy is more or less likely to be complied with. Surprisingly, it has yet to be empirically tested in research on SME-friendly procurement policy. Its use here is novel and injects greater scientific rigour and intellectual depth to the SME-public procurement debate. An institutionally-derived framework put forward by Oliver (1991) is employed to explain and predict compliance with SME-friendly policy. It understands institutional compliance to be a function of four major factors: the rationale for compliance with SME-friendly policy; the institutional context of public procurement; the content of SME-friendly policy; and the control mechanisms associated with it. These factors are brought together in a predictive model of SME-friendly policy compliance. *A priori*, the

model is expected to have significant explanatory and predictive value. The next chapter makes explicit the realist philosophical assumptions underpinning the model, the survey method used to conduct the study, and the operationalisation and measurement of all the variables under consideration.

Fig. 7 Predictive model of institutional compliance



Chapter 3:

Methodology

3.0 Overview of chapter three

This chapter sets out the methodological basis of the study. It is divided into two main parts. The first, covered in sections 3.1-3.4 inclusive, deals with questions on the philosophy of science and what they mean for investigating policy compliance. The predictive model put forward in chapter two implies that the study is philosophically positivist. It is hypothetico-deductive in form and presumes that causative effects can be observed in the social world. Elucidation on the philosophical precepts of the study is still required, however. The chapter begins in section 3.1 with a discussion on the need for philosophical awareness in social inquiry. Following on, section 3.2 provides an overview of the divergent philosophical perspectives available to researchers. The degree to which any philosophical perspective should dictate social inquiry is queried in section 3.3. One school of thought argues that philosophical first principles should strictly determine research practice. Another school advocates an agnostic take on the role of philosophy in social inquiry. Section 3.4 then maps out the critical realist philosophical assumptions made in this study and their implications for investigating SME-friendly policy compliance.

The second part of the chapter concentrates on the design and implementation of the primary research phase of the study (sections 3.5–3.17). The research objectives and the questions that flow from it are articulated first in section 3.5. In section 3.6 the focus is on the survey method, which was used to gather data for the predictive model. The strengths and weaknesses associated with the survey method are enumerated. So too are the various modes through which surveys can be conducted. Justification is given for why the self-administered questionnaire was most appropriate for this study. The practicalities of using questionnaires in social inquiry

are grappled with in section 3.7. Particular attention is paid to best practice questionnaire design and how it was applied in this study. Leading on, section 3.8 describes the steps that were taken to underscore the reliability and validity of the questionnaire instrument, including guarding against social desirability bias. Having dealt with questionnaire design issues, the chapter proceeds to the data collection phase. Information is given in section 3.9 on why public buyers were selected as survey respondents and how this population was accessed. Aspects around survey implementation are dealt with in section 3.10. E-surveying was used, and the advantages and disadvantages of this approach are listed.

Ireland served as the setting for the study. The suitability of Ireland as a research context, including major trends and events that have shaped public procurement in recent years, is discussed in section 3.11. The next two sections deal with the measurement of policy compliance, which is the dependent variable in the predictive model. Section 3.12 explains how an index was specially created to measure compliance with SME-friendly procurement policy. Section 3.13 then clarifies the weighting system employed to compute compliance scores. The two sections after this deal with the independent and control variables used to predict policy compliance. Section 3.14 describes how the eight institutional factors in the model were operationalised and measured. Section 3.15 then identifies the seven control variables used in the model and explains how these were operationalised and measured. Preliminary analysis of the survey data is undertaken in section 3.16. Covered here is the survey response rate as well as a profile of the respondents. The penultimate section 3.17 looks at respondent representativeness. Using the extrapolation technique, it is shown that respondents are representative of the public

buyer population in Ireland. The main points of the methodology chapter are summarised in section 3.18.

3.1 Philosophical awareness

Over three decades ago Morgan and Smircich (1980) made the prosaic point that social inquiry of any form embodies assumptions over the nature of reality (ontology), the nature of the relationship between the inquirer and reality (epistemology), and how the inquirer can and should go about discovering knowledge (methodology). Their highlighting of the ontological, epistemological and methodological dimensions of social inquiry was a reaction to the predominance of ‘abstracted modes of empiricism based on both quantitative and qualitative methods’ (1980:491). It was also a salutary reminder that the philosophical orientations of the individual researcher generate particular forms of knowledge, not the methods themselves. In the intervening years many other scholars have reiterated the need for researchers to be cognisant of the philosophical assumptions on which their inquiries are based (Astley, 1985; Cunliffe, 2010; Denzin and Lincoln, 2003; Henwood and Pidgeon, 1996). The common thread in the various arguments made is that the gathering, analysis and interpretation of data are inextricably linked to our understanding of what constitutes legitimate inquiry and warrantable knowledge. Social inquiry methods, as Buchanan and Bryman (2007:497) noted, are never ‘neutral techniques for bringing reality into focus’. As has been illustrated by Kirkwood and Campbell-Hunt (2007) and Gioia, Donnellon and Sims (1989), phenomena can be rendered in very different ways depending on the philosophical vantage point of the researcher.

The ends which we see social inquiry serving are also products of our underlying philosophical assumptions. That is to state that the purpose of inquiry is

philosophically implied (Guba, 1990; Sarantakos, 1993; Slife, and Williams, 1995). Those for whom social inquiry is akin to natural science prioritise the explanatory and predictive function of research. Their social phenomena of interest are to be causally explained, predicted and controlled through experimental design in much the same way as scientists study the natural and physical environment. Alternatives to this scientific approach understand the purpose of social inquiry in markedly different terms. Among these, the interpretivist perspective focuses on eliciting the meanings that individuals and groups ascribe to events and objects (Denzin and Lincoln, 2003). As far as they are concerned, prediction and control are not applicable to social inquiry. The stance of critical theorists, which include Marxists and feminists, is different again. They understand social inquiry as a politically-oriented process to enlighten, empower and ultimately emancipate subjugated groups (Fay, 1996). Social inquiry can mean very different things and be put to very different uses depending on the starting premises of the researcher. The next section overviews the main philosophical perspectives and their implications for social inquiry.

3.2 Competing philosophical perspectives

Questions on the nature of reality, our relationship to reality and how we can make claims about it have been largely settled in the physical sciences. The same cannot be said of the social sciences. Whether the study of social phenomena is amenable to scientific principles has long been debated and there is no agreement on even the most fundamental of philosophical questions (Ryan, 1981). Morgan (1980) identified four philosophical positions in organisation science based on objectivist or subjectivist ideas of knowledge and whether research has a change or stability logic. These included a functionalist or standard scientific worldview, an interpretivist

perspective, and radical humanist and structuralist critiques aimed at transforming society. Opinion is divided as to the effect of multiple philosophical perspectives for social inquiry. For some, philosophical pluralism has led to less complacency over the use of the standard model of science and has stimulated innovation in research methods (Buchanan and Bryman 2007; Eisner, 1990; Popkewitz, 1990). Others see it as symptomatic of an unhealthy pre-occupation with philosophy (Hammersley, 2011), which begets intellectual provincialism (Gioia and Pitre, 1990) and stokes ‘methodology wars’ (Bredo, 2009). The sections below set out the main philosophical perspectives and their tenets. Section 3.2.1 focuses on the positivist strand of philosophical thought. Anti-positivism is described in section 3.2.2. Section 3.2.3 engages with critical realism, a revised form of positivism which is widely adhered to in contemporary scientific inquiry.

3.2.1 Positivism

Historically, social science took as its philosophical reference point the principles of empiricism set down in the natural sciences (for a full history see Baert, 2005 or Outhwaite, 1987). This led social scientists to assume the existence of an external reality, albeit ‘incarnate in the practices and products of its members’ (Manicas, 1987:272), which could be fully apprehended by the inquirer through the use of controlled experiments. In philosophical terms the study of society was envisaged as both realist and objectivist. It was also positivist to the extent that scientific method was understood as the sole source of knowledge. Developments within the natural sciences throughout the twentieth century challenged at a fundamental level the tenets of positivism. Discoveries around sub-atomic particles, for one, proved that reality was more than that which could be sensed or observed (Phillips, 1990). The belief that researchers were able to access reality in theory-neutral, value-neutral

ways also started to break down, and with it the assumption of pure objectivism (Miller, 1987; Mitroff, 1972). These discoveries and changes in beliefs undermined positivism's status as the preeminent philosophical standard for scientific inquiry (Manicas, 1987). Nonetheless, its precepts continue to pervade thinking on scientific inquiry, including in the management science discipline (Behling, 1980).

3.2.2 Anti-positivism

Exposure of the limitations of positivism led social science down a number of routes in search of philosophical alternatives (Outhwaite, 1987). One of these routes advocated outright rejection of the standard scientific model – a paradigm that came to be known as interpretivism. Its origins are found in earlier anti-positivist thinking from the 19th century, which eschewed natural sciences as the ideal for rational understanding and encouraged researchers to empathise with their social objects of investigation (Von Wright, 1996). From an interpretivist worldview there is no independently existing reality; rather, the world is mind-dependent and inseparable from the beliefs of social actors (Denzin and Lincoln, 2003; Lincoln, 1990). The only way that researchers can apprehend reality is by tapping into the meanings that they and other relevant social actors hold about it. Objectivity in social inquiry disappears under this perspective and all claims to knowledge become products of social conventions and group interests (Trigg, 1985). The implications of abandoning realism and objectivism as philosophical cornerstones are profound. Instead of explaining and predicting a single tangible reality, the rationale for inquiry turns on how we socially construct our own realities.

3.2.3 A middle way - critical realism

Not all the paradigmatic alternatives that emerged in the wake of positivism repudiated its core tenets. One of these, critical realism, grew out of a revision of the

core tenets of positivism (Baert, 2005; Benton and Craib, 2001; House, 1991; Phillips, 1990). As the name suggests, critical realism, like positivism, still adheres to a realist ontology in which a social world exists and acts independently of any beliefs held about it. Unlike its predecessor, critical realism does not claim that this reality can be perfectly apprehended. It concedes that many of the mechanisms that generate social phenomena are unobservable and cannot be experienced (Manicas, 1987). Epistemologically, critical realists propose a modified form of objectivism. Even though human access to an independent reality is theory-laden and value-laden, discovering the truth of reality can still serve as a 'regulative ideal' (Phillips, 1990). Rejection of a foundation of knowledge is not taken to mean that valid knowledge claims and scientific description are impossible (Douglas, 2011; Trigg, 1985). Scientific belief for critical realists is neither the ultra-rationality of positivism nor the mob rule of anti-positivism (Manicas, 1987). Important from the perspective of this study, critical realism is said to have a high degree of application in the management field; affording researchers a philosophical foundation that is at once intellectually defensible and practical to use (Fleetwood, 2004).

3.3 Questioning philosophical determinism

As stated at the outset, social inquiry and the knowledge claims generated by it are predicated on a set of ontological, epistemological and methodological assumptions. These assumptions influence what researchers see as data and how they collect, analyse and report on it (Cunliffe, 2010). Before this again, philosophical assumptions determine the actual purpose of social inquiry – prediction versus meaning, elicitation versus emancipation. Just how far researchers should allow philosophical first principles to shape practice is open to debate. Some take the view that ontological and epistemological commitments should strictly determine research

practice (Lincoln, 1990; Lincoln and Guba, 1985; Morgan and Smircich, 1980; Smith, 1983; Smith and Heshusius, 1986). This philosophical determinism view is set out in section 3.3.1. For others a looser coupling of philosophy and research practice is advisable (Firestone, 1987, 1990; Henwood and Pidgeon, 1996; Howe, 1985; Seale, 1999a, 1999b). Their position is set out in section 3.3.2 Following on from the latter, section 3.3.3 raises a number of points relevant to the practicalities of doing research. While these do not detract from the desirability of philosophical awareness, they are a reminder that factors other than philosophical first principles having a bearing on how research is conducted.

3.3.1 The case for philosophical determinism

The position taken by some methodologists is that philosophical first principles are the starting point for any social inquiry. Advocates of this view include Guba (1990), Lincoln (1990), Lincoln and Guba (1985), Morgan and Smircich (1980), Smith (1983) and Smith and Heshusius (1986). Their contention is that each of the main philosophical perspectives implies a distinct conceptualisation of research, which has to be followed through in practice. In the first instance a researcher must situate themselves in one or other of the main philosophical traditions. After this, the researcher is obliged to carry out their inquiry in ways consistent with the principles of the chosen tradition. For those working within the positivist tradition, this entails conducting controlled research designs to discover empirical generalisations. In contrast, researchers adhering to an interpretivist perspective are supposed to use hermeneutic and dialectic techniques to uncover the meanings of their social objects of interest. What is critical is that there is a consistent thread running from the ontological position, through to the epistemological commitment, on to the methodology, and even the criteria for judging the credibility of knowledge claims.

Smith and Heshusius (1986:10) sum up the philosophical determinism position through their assertion that ‘what works depends on the kind of work one wants inquiry to do, which in turn depends on the paradigm within which one is working’.

3.3.2 The case against philosophical determinism

The appropriateness of using philosophical first principles as the starting point for research is questioned by other methodologists. Seale (1999a, 1999b) voiced concern about the over-determination of research practices by philosophical schemes, arguing that philosophical positions should not be ignored, but nor should they be treated as dogmas whose postulates must always be acted out in practice. As he stated, ‘intense methodological awareness, if engaged in too seriously, can create anxieties that hinder practice, but if taken in small doses can help to guard against more obvious errors’ (1999b:475). Bredo (2009), Firestone (1987, 1990), Henwood and Pidgeon (1996), Howe (1985, 1988) and Ramsay (2007) have expressed similar reservations over fixating on epistemology when selecting research methods. The latter author addressed his message directly to the field of supply chain management. Instead of philosophical assumptions strictly determining practice Howe (1988:13) and Firestone (1987, 1990) have both recommended that the former ought to be brought into ‘some reasonable state of equilibrium with methods’. What happens in research practice supports this less dogmatic understanding of philosophy in social inquiry as, for example, with interpretivists’ use of positivist criteria to defend the validity and reliability of their work (LeCompte and Goetz, 1982; Maxwell, 2002).

3.3.3 Philosophical determinism and the practicalities of doing research

The practicalities of doing research should not be forgotten when considering the role of philosophy in social inquiry. The prominent management academic Richard Daft (1983) postulated that limiting debate on how to generate new knowledge to a

choice of quantitative versus qualitative methodologies obscures the ‘craft of research’. His experience led him to believe that interesting findings are less the outcome of unthinking adherence to one philosophical paradigm or another and more the result of ‘experience and mastery of the attitude and frame of mind that make up the research craft’ (1983:544). Acknowledgement that research practice cannot always be ascribed to a single paradigm and is more of a serendipitous process than depicted in the literature is a theme that cuts across discussion of methodology in management science (Lundberg, 1976; Mintzberg, 1979). Precisely because of this it is argued that researchers should not feel under ‘obligation to fulfil philosophical schemes through research practice’ (Seale, 1999b:466). To make the resolution of philosophical problems a precondition of social inquiry is even believed to stifle the emergence of interesting findings. Hammersley (2011) surmised that researchers can end up treating philosophical debates as if they had direct repercussions for practice when they do not, dwelling needlessly on existential questions, and misrepresenting abstruse philosophical insights.

Resource availability can be just as important as philosophical beliefs in determining research practice; and methodologies are often selected for pragmatic rather than paradigmatic reasons (Henwood and Pidgeon, 1996). Time availability, financial resources and securing access to research subjects often shape the contours of the inquiry process more so than rumination on the nature of reality and our access to it. The same can be said of researchers’ skillsets. A lack of statistical ability rather than a genuine commitment to an interpretivist worldview might lead researchers to gravitate towards qualitative modes of inquiry that unearth meanings and feelings. The context in which a research project is conceived can also affect what happens in practice. Buchanan and Bryman (2007), for instance, identified the possibility of

organisational, political, historical and personal factors impacting on research practices. For the same authors, these factors are not impediments to social inquiry so much as naturally occurring influences, and should be accepted on this basis. The implication is that in addition to ontological and epistemological commitments, social inquiry is dictated by individual, organisational and contextual circumstances. Inquiries guided strictly by philosophical first principles are unlikely to be either workable or even optimal in terms of generating interesting findings about our phenomena of interest.

3.4 Critical realism

Philosophical awareness has been the defining theme of this chapter so far: awareness in the sense that all research is philosophically grounded; awareness of the opposing philosophical schools of thought; and awareness that a doctrinaire approach is best avoided when conducting social inquiry. These themes provide a lead-in to discussing the critical realist basis of this study. As referred to in section 3.2.3, critical realism stands apart from pure positivism and relativism (Baert, 2005; Benton and Craib, 2001; Bernstein, 1983; Garrison, 1986; House, 1991; Phillips, 1990). It is realist in ontology, aims for objectivism and recognises fixed research design as central to the process of knowledge discovery. It also qualifies these precepts in important ways: reality is more than what humans can observe or sense, and knowledge claims are mediated through pre-existing theories, concepts and values. Critical realism adds up to a ‘balanced and eclectic scepticism’ that treads a path between the naïve realism of positivists and the anchorless relativism that defines anti-positivism (Webb, 1995:2). It is, as Bernstein (1983:230) put it, cut through with an element of ‘practical rationality’. Sections 3.4.1-3.4.8 examine the ontological, epistemological, methodology and criteria foundations of critical realism

and what they mean for investigating compliance with SME-friendly procurement policy (see Table 10, pg. 151). Throughout the same sections reference is made to what this study would have looked like had an interpretivist perspective been taken (see Table 11, pg. 153).

3.4.1 Realist ontology

Perspectives on the nature of reality in social inquiry can be split into realist and relativist camps (Morgan and Smircich, 1980). Critical realism falls within the former. For critical realists, reality exists and acts independently of any beliefs held about it. The alternative is a relativist stance wherein reality has no existence save that which individuals or groups mentally construct of it. Its realist ontology notwithstanding, critical realism is distinct from positivism in its original form. While the latter delimits reality to entities that are manifested in experience (Kolakowski, 1996), critical realism accepts that many of the theoretical concepts of science have meanings that go beyond sense impression (Phillips, 1990). There is, as Hanson (1958) succinctly said, more to reality than meets the eyeball. Reality is understood by critical realists to be stratified, comprising phenomena which we can know and empirically measure and, beneath these, causal mechanisms that are more difficult to observe (Baert, 2005; House, 1991). The events we observe, experience and measure – the objects of theory – do not fully reflect the complexity of the underlying mechanisms that cause these events (Manicas, 1987; Von Hayek, 1979). Human apprehension of social reality is imperfect as a result.

3.4.2 Realist ontology and policy compliance

Taking a critical realist stance has a number of implications for investigating SME-friendly procurement policy. Fundamentally, it means that the public procurement system, the policies that govern it and the behaviours of its main actors all exist as

part of a single, independent reality. They sit outside any beliefs that the researcher holds about them. This study does not create nor alter the reality of public procurement; rather, the reality of public procurement exists outside the study. Specifically in relation to the objectives of this study, it means that the object of inquiry – compliance with SME-friendly procurement policy – is knowable and can be empirically observed and measured. At the same time it is acknowledged that the causative processes associated with policy compliance are unlikely to be definitively explicated. An anti-realist or interpretivist stance asserts the opposite. SME-friendly procurement policy is not part of an independent reality and is not discoverable on such terms. Instead, the subjective beliefs held by the relevant stakeholders and actors constitute SME-friendly procurement. Any account based on these beliefs is only one among an infinite number of possible interpretations.

3.4.3 Modified objectivist epistemology

The epistemological stance of critical realism is neither wholly objectivist nor subjectivist (Benton and Craib, 2001; Guba, 1990; Hammersley, 1992; Phillips, 1990; Webb, 1995). Unlike the pure objectivism of the positivist school, critical realism rejects the idea that access to a foundation of knowledge is ever possible. From a critical realist perspective all claims to knowledge are theory-laden and value-laden. Whereas subjectivists see this admission as grounds for abandoning any possibility of discovering truths, critical realists do not. Discovering truths about our social world is still valued as a ‘regulative ideal’ (Phillips, 1990) which should shape one’s ‘attitude of mind’ when it comes to social inquiry (Seale, 1999a). As Trigg (1985) and Webb (1995) have each argued, conceding that pre-existing concepts and theories mediate any claims we can make about our social realities does not preclude knowledge claims that are largely true from emerging. So while social inquiry for

Astley (1985:497) is a ‘fundamentally subjective enterprise’, critical realists demur from this view and subscribe to a qualified form of objective truth. Various labels have been used to denote this epistemological stance, including ‘modified objectivism’ (Guba, 1990) and ‘epistemological conservatism’ (Garrison, 1986).

Integral to the epistemology of critical realism is acceptance that values and interests influence knowledge discovery. Values are said to make up the ‘fabric of social research’ and can be defended like any other kind of judgement (Howe, 1985:12). Even in the natural sciences normative judgements, moral, religious and political considerations impinge on inquiries (Barber, 1961; Mitroff, 1972). By some accounts values and interests are indispensable to the research process and act as resources for scientific thinking (Benton and Craib, 2001). Mitroff (1972) came to this conclusion after conducting interviews with scientists. He found that their motivation for discovering new knowledge was spurred on by their own hunches, preferences and personal interests. Popkewitz (1990:62) did likewise. For him, ‘the common sense approach that defines values as distinct and separable from the procedural concerns of science has its own poverty by decontextualizing the way choices are made and the priorities formed’. The very act of choosing one line of inquiry over another is itself a value-based decision; a reflection of what the researcher believes to be worth pursuing (Douglas, 2011; Trigg, 1985). For critical realists, values are inherent to the research process. What is important is maintaining the distinction between a researcher’s own normative judgements and scientific description (Douglas, 2011).

The modified objectivism of critical realism has another important implication for social inquiry. Acceptance that theories and values mediate how we discover

knowledge means that reality is *represented* rather than reproduced (Hammersley, 1992). Representation of reality comes through ‘specific truth-producing social practices’ (Manicas, 1987:264). Arriving at absolute certainty that knowledge corresponds to an independent reality is never possible, but producing knowledge claims whose validity we are *reasonably confident of* is possible (Hammersley, 1992). Just because our knowledge claims never carry absolute certainty does not mean that we cannot adjudicate between rival claims or achieve a degree of consensus over which claims appear to be most trustworthy (Miles and Huberman, 1984; Phillips, 1990; Webb, 1995). Not every claim to knowledge is valid and some claims to knowledge are more plausible than others. In the final analysis, ‘knowledge is generated not by fiat in the minds of individuals but through a rigorous examination of ideas in public communication’ (Astley, 1985:499).

3.4.4 Modified objectivist epistemology and policy compliance

If, as critical realists contend, there is no foundation of knowledge that we can access, then there is no way of knowing with certainty if the reality of policy compliance has been captured. How we know it is mediated through pre-existing theoretical concepts and is represented and reported as such. This representation is intended to be authentic and accurate, so that compliance as represented approximates to its true reality. Critical realists’ acceptance that some claims to knowledge are more valid than others makes accurate representation an imperative. A subjectivist approach produces a markedly different depiction of policy compliance, mainly because there is no external reality of SME-friendly procurement to be apprehended and represented in the first place. The only way to know it is to access the meanings and beliefs that procurement actors hold about it. The reality of SME-friendly procurement is whatever they believe it to be. While

true to the holder of the beliefs, a subjectivist account of SME-friendly procurement could never claim privilege over any other account. It would simply be one among multiple mental constructions of what SME-friendly procurement is and how it should be understood.

3.4.5 Non-experimental fixed design methodology

As with ontology and epistemology, the methodology associated with critical realism represents a refinement of that advocated by the original positivists. According with the latter, a fixed research design is still held as the primary strategy for discovering knowledge and the emphasis is still on measuring and quantifying phenomena of interest, and then testing cause and effect relationships (Guba, 1990). Where critical realist methodology diverges from original positivism is in its acceptance that the nature of social inquiry precludes the use of experimental research design. This is because the social objects of our investigation cannot be manipulated by the researcher, for the most part. As well, for critical realists the process of knowledge discovery is fallible and fixed research designs are no guarantee that an accurate representation of reality will be produced (Benton and Craib, 2001). Critical realists also admits to the possibility that pragmatic as well as paradigmatic factors – access to research subjects, for example – can determine methodological strategies (Daft, 1983; Firestone, 1987; Seale, 1999a). In effect, this opens the way for other methodological strategies to be used as substitutes for, or in conjunction with, a fixed research design.

3.4.6 Non-experimental fixed design methodology and policy compliance

The critical realist methodological stance is reflected in how SME-friendly procurement policy is investigated in this study. A theoretically-informed model is devised to test the conditions under which policy compliance is more or less likely to

come about. Data to populate the model is systematically gathered from a national population of public buyers, thus allowing the key concepts to be measured and quantified (see section 3.9). Inferential statistical techniques are then used to test the effects of institutional pressures on policy compliance. As part of this process a number of variables are controlled for. The use of a fixed research design was determined not only by realist philosophical principles, but also by practical considerations; something which critical realists are comfortable with. Crucial here was securing access to a national database of public buyers, which made the survey method possible. Reliance on non-realist methodological approaches would have precluded measuring and predicting policy compliance. The emphasis would have been on eliciting the meanings that actors ascribed to their procurement practices using the techniques of hermeneutics and dialectics (Denzin and Lincoln, 2003). Discovering ‘objective truth’ is irrelevant under this perspective.

3.4.7 Criteria

Using criteria to assess and demonstrate the credibility of research output is expected of researchers operating from a realist position (Cresswell and Miller, 2000; Healy and Perry, 2000; Smith, 1990). Because truth is a ‘regulative ideal’ there must be some system or set of criteria that can be used to support the veracity of knowledge claims and gain the confidence and approval of the research community (Firestone, 1990; Phillips, 1990; Webb, 1995). Researchers need to be able to persuade peers not only that their findings are ‘worth paying attention to, worth taking account of’ (Lincoln and Guba, 1985:290; also, Lincoln and Guba, 2002) but also that they are not unreasonable and correspond to reality (LeCompte and Goetz, 1982; Miles and Huberman, 1984). There is no pre-specified set of criteria in the critical realist tradition, although validity, reliability and objectivity act as benchmarks (Cook and

Campbell, 1979; Marshall, 1990). The recommendation is for researchers to be guided by what is most effective and practical given the circumstances of the inquiry (Seale, 1999a). Cognisance should also be taken of the norms and protocols established around the use of criteria in the particular subject domain (Miles and Huberman, 1984). The academic community of interest also has a key role to play as arbiter of what counts as credible, objective knowledge (Douglas, 2011).

3.4.8 Criteria and policy compliance

The critical realist approach to appraising research output has the following implications for this study. First and foremost, it imposes a requirement for criteria capable of demonstrating that the empirical component is of acceptable academic standard and that any claims made from it are credible and scientifically robust. This relates back to the realist contention that some claims to knowledge are more valid than others, and so there must be criteria for separating valid from invalid claims. An anti-realist philosophical perspective places no such obligation on the researcher as all knowledge claims are deemed to be equally valid and legitimate. The two broad criteria appealed to in this study are truth and relevance. Their use here is consistent with advice offered by Hammersley (1992:68) that ‘research must not only produce findings that seem likely to be true, these findings must also be of human relevance’. Truth as a criterion is understood by reference to the positivist standards of reliability and validity (see section 3.8). The relevance criterion concerns the contribution of the findings to the current body of scholarship on SME-friendly procurement, as well as their import for policy making and practice. These are discussed in detail in chapter five.

Table 10 Implications of a critical realist stance

Philosophical dimensions	The postulates of critical realism	What critical realism means for this study
<p>Ontology <i>What is the nature of reality?</i></p> <p>Critical realism</p>	<p>An independent reality exists</p> <p>Reality is stratified</p> <p>Reality can be apprehended but not everything can be observed or sensed by human faculties</p> <p>Natural laws and empirical generalisations govern reality</p>	<p>Actions taken/not taken to make public procurement more SME-friendly form part of an independent reality. The researcher had no part in constructing this reality. It exists separate from any beliefs held about it and from the process of inquiry</p> <p>The reality of SME-friendly procurement can be understood at a number of levels: as an event that is discernible; as an event that can be empirically captured; and as a complex series of mechanisms that give it form and shape</p> <p>The precise mechanisms that lead to SME-friendly procurement are likely to lie beyond full explication</p> <p>The workings of the public procurement system and the behaviours of public buyers can be understood in terms of empirical generalisations or regularities</p>
<p>Epistemology <i>What is the nature of the relationship between the knower and the known?</i></p> <p>Modified objectivism</p>	<p>There is no foundation of knowledge that we can access</p> <p>Our knowledge of reality is always mediated through pre-existing concepts, theories and interests</p> <p>It is possible to make claims to knowledge which are representative of reality. The aim is to produce accounts</p>	<p>No definitive account of SME-friendly procurement is ever possible</p> <p>No account of SME-friendly procurement is concept-neutral or theory-neutral</p> <p>The inquiry endeavours to <i>represent</i> the reality of SME-friendly procurement</p>

	<p>that correspond to reality</p> <p>Some claims to knowledge are more valid/true than others</p>	The aim of the inquiry is to produce credible and defensible findings on compliance with SME-friendly procurement policy
<p>Methodology</p> <p><i>How should the inquirer go about discovering knowledge?</i></p> <p>Modified experimentalism</p>	<p>Methodology should take the form of modified experimentalism</p> <p>Methodological selection can be based on pragmatic considerations (as well as paradigmatic considerations)</p>	<p>Investigating policy compliance is conducted using a fixed research design. Firstly, a hypothetico-deductive model for policy compliance is constructed. Secondly, data is systematically gathered from a population of public buyers. The model is then tested using inferential statistical procedures</p> <p>The choice of a survey-based approach (as part of a fixed research design) was made possible by having access to a database of public buyers</p>
<p>Criteria</p> <p><i>What criteria should be used to assess the quality of research output?</i></p> <p>Blended</p>	<p>Establishing the credibility of research findings is required</p> <p>A paradigmatic blend of assessment criteria is permitted</p>	<p>Two assessment criteria – truth and relevance – are used to underscore the credibility of the findings</p> <p>To demonstrate the truth of the findings the positivist standards of reliability and validity are relied on</p> <p>Demonstrating relevance is by way of the empirical, theoretical and practitioner contributions of the findings</p>

Table 11 Implications of an interpretivist stance

Philosophical dimensions	The postulates of interpretivism	What interpretivism would have meant for this study
<p>Ontology <i>What is the nature of reality?</i></p> <p>Relativist</p>	<p>There is no reality independent of the human mind; reality is only ever a mental construction</p> <p>Natural laws do not govern (social) reality</p> <p>The apprehension of reality is socially and experientially based</p>	<p>Public procurement, policies governing public procurement and public buyers' behaviours do not exist as part of an independent reality. Instead they are mentally constructed at individual/group level</p> <p>The workings of the public procurement system and the behaviours of public buyers cannot be reduced to natural laws and empirical generalisations</p> <p>Apprehension of public procurement comes through our own mental schemas. There is no external referent for apprehending public procurement</p>
<p>Epistemology <i>What is the nature of the relationship between the knower and the known?</i></p> <p>Subjectivist</p>	<p>Reality has no meaning apart from what is held to be real by individuals/groups</p> <p>How we know our social world is entirely subjective</p> <p>Human knowledge is socially constructed</p> <p>No claim to knowledge is more privileged than any other; 'truth' is illusory</p>	<p>The reality of SME-friendly public procurement is whatever individuals/groups hold it to be</p> <p>There are an infinite number of SME-friendly procurement realities</p> <p>Concepts and theories constitute our apprehension of SME-friendly procurement (as opposed to mediating it) Everything that is known or can be known of SME-friendly procurement is the product of social forces</p> <p>No account of SME-friendly procurement is more valid/true than any other. Accounts of SME-friendly procurement are true only from the perspective of the individuals/groups</p>

	The inquirer has an active role in creating findings	<p>responsible for constructing them</p> <p>The construction of a particular reality of SME-friendly procurement is co-created by the inquirer</p>
<p>Methodology</p> <p><i>How should the inquirer go about discovering knowledge?</i></p> <p>Hermeneutics-Dialectics</p>	<p>Standard scientific methodology is inapplicable to investigating the social world</p> <p>To discover knowledge we need to tap into how individuals construct realities (hermeneutics)</p> <p>Individual constructions of a particular social phenomenon should be compared and contrasted so that patterns or commonalities can be discerned (dialectics)</p>	<p>The public procurement system, policies governing public procurement and public buyers' behaviours cannot and should not be explicated using fixed research designs</p> <p>How public buyers and other stakeholders construct the reality of SME-friendly procurement should be the focus of the inquiry</p> <p>Constructions around the reality of SME-friendly procurement offered by public buyers and other stakeholders, including that of the inquirer, should be brought into some sort of dialogue</p>
<p>Criteria</p> <p><i>What criteria should be used to assess the quality of research output?</i></p> <p>Not applicable</p>	<p>Assessment criteria are not relevant to interpretivist inquiry as no account can claim to have privileged status over any other</p>	<p>It is not necessary or even appropriate to demonstrate the credibility of the results using assessment criteria such as truth and relevance</p>

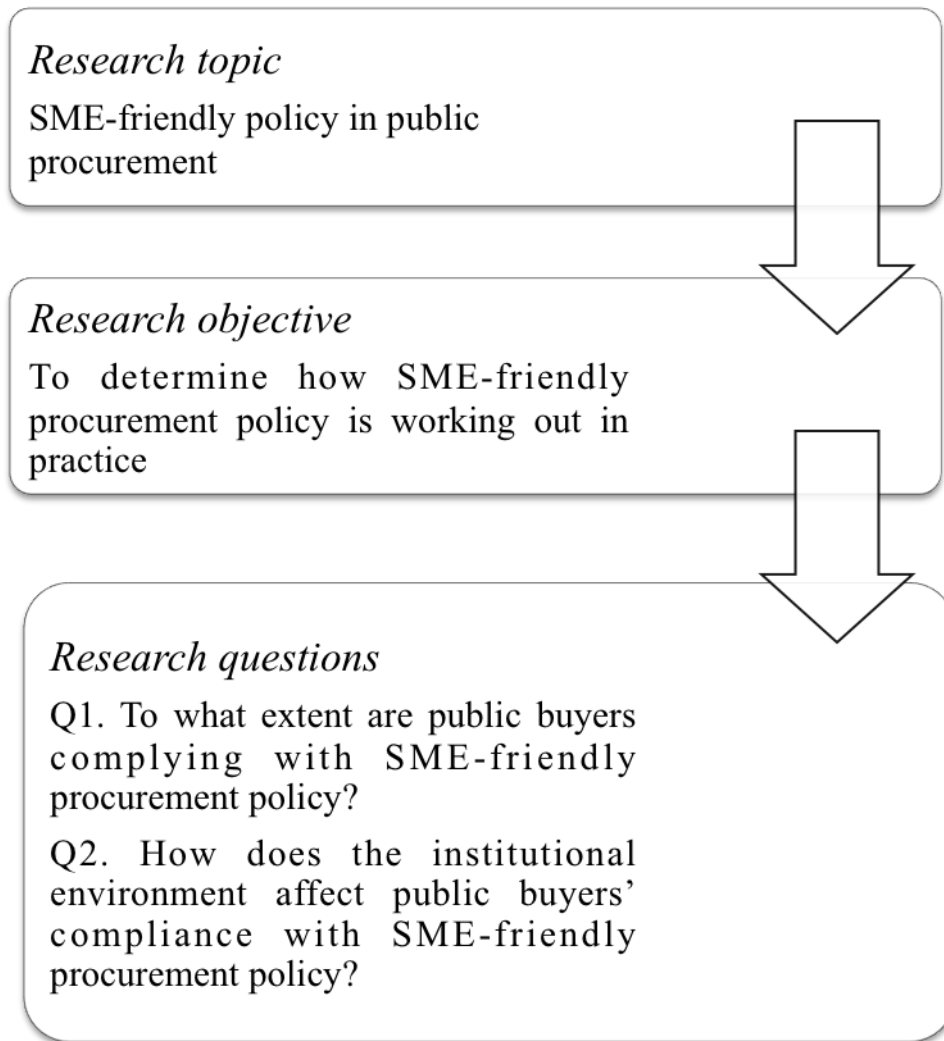
3.5 Research objective

Up to this point the chapter has attended to the philosophical dimension of the study.

The emphasis now shifts to the primary research phase. Before delving into the mechanics of how the research was carried out it is important to be clear on the overarching objective of the study and the questions it seeks to answer (see Fig. 8).

As claimed in the introduction and as detailed in chapter one, interest in SME-friendly procurement policy has not been matched by evidence on its implementation. Responding to this gap, the research objective is to determine how SME-friendly policy is working out in practice. Research objectives lead to the specification of research questions (Hok, De Leeuw and Dillman, 2008; White, 2009). Two research questions guide the study. The first is the extent to which SME-friendly policy is being complied with - the descriptive part of the research. The second is the impact of the institutional environment on policy compliance – the explanatory part of the research. Underneath the second question are eleven hypothesised relationships between institutional factors and compliance behaviour (see section 2.9). Testing these hypotheses will go some way towards deciphering how the institutional environment affects compliance with SME-friendly procurement policy.

Fig. 8 Research topic, objective and questions



3.6 Survey method

The survey method was used in this study. Using the survey method is appropriate where the design of the study is fixed prior to data collection and where there is a reasonable level of conceptual understanding about the phenomenon of interest (Robson, 2002). In this study a model of SME-friendly policy compliance was devised prior to the data collection phase (see page 131). The model was derived from concepts associated with an institutional theory perspective on compliance. The survey method enabled the theoretically-informed model to be tested. The remainder of this section explores the survey method in greater detail. Section 3.6.1 explains the logic behind the survey method. Important here is how surveys conform to the

scientific model of social inquiry. The limitations of using the survey method for social inquiry are unpicked in section 3.6.2. Achieving scientific rigour and standardisation is said to come at the expense of unearthing the meanings and complexity of the social world. Section 3.6.3 assesses the various ways through which surveys can be executed, ranging from observation to self-administered questionnaires. Justification for preferring self-administered questionnaires is given. The fourth and final section tackles issues relating to the design of self-administered questionnaires.

3.6.1 Characteristics of the survey method

The survey method approximates to a scientific model for carrying out social inquiry (Babbie, 1973). All survey instruments are designed to measure some social object of interest in a standardised and methodical way (May, 1997; Sapsford, 2006). Their implementation must also be systematic and consistent. Ideally, other researchers should be able to replicate any given survey with the same measurement instrument and population sample. The analytical approach characterising survey-based research finds its parallel in the natural sciences (Babbie, 1973; De Vaus, 1991; Marsh, 1982). The aim is not only to describe *what* is going on in the social world but to explain *why* it is going on. In explaining social phenomena deductive reasoning is employed (Hall and Hall, 1996; May, 1997; Sapsford, 2006). A researcher will start with a general theory before deriving specific concepts from it. Relationships between these concepts are specified in a causal model. The same concepts are operationalised and tested using data gathered from the population of interest. Findings are generalisable provided the survey sample is representative of the population from which it is drawn. The defining characteristics of survey research are its standardised and logical form, its attempt to make causal inferences between variables, its ability to

generalise findings beyond its respondent sample, and its parsimonious approach to representing social phenomena of interest (Babbie, 1973).

3.6.2 Limitations of survey method

As with all research designs, the survey method is not without limitations. At a philosophical level surveys have been criticised for being incapable of explicating the meaningful aspects of social action and why people come to adopt particular values and behaviours (Hakim, 2000; May, 1997). Critics of the survey method argue that the purpose of social inquiry is not to explain behaviour but to understand it in all its complexity (Marsh, 1982). Relatedly, surveys are criticised because they divorce individual beliefs and actions from the context in which they occur (De Vaus, 1991). The idea that the survey method can lead to the discovery or verification of causal relationships is also challenged. It is said that survey evidence can corroborate a hypothesis by observing correlations but cannot definitively prove that one or more independent variables cause some outcome (Marsh, 1982; Robson, 2002). In terms of the accuracy of surveying, doubts have been raised over the extent to which expressed opinions correspond to habitual behaviour (Bertrand and Mullainathan, 2001; Sapsford, 2006). As well, responses to surveys can be affected by temporal and environmental factors (Schwarz et al., 2008). Another problem is that respondents may not necessarily treat the research exercise seriously and can misunderstand what is being asked of them (Robson, 2002). These generic criticisms of the survey method are a reminder that quantifying and predicting compliance with SME-friendly procurement policies does come with caveats attached.

3.6.3 Survey modes

Surveys can take a number of formats. While synonymous with questionnaires, surveys can also encompass visual observation techniques, content analysis and the

systematic counting and coding of qualitative data (Moser and Kalton, 1985). The survey instrument used in this study took the form of a questionnaire. It was the only survey method capable of gathering the data needed to measure and predict compliance with SME-friendly procurement policy. The other modes were either inapplicable (content analysis) or impractical (visual observation or population-wide interviewing) for the purposes of this study. Expanding on this, there was no media or documentary source that would have enabled satisfactory measurement of policy compliance and the objective and subjective factors that predict it. Surveying behaviour through observation would have been similarly problematic, requiring ongoing observation of public buyers in their work environment over a number of months. Quite apart from the difficulties of securing consent for such a research undertaking, the time and effort required would have been beyond the means of this study. Direct observation can also interfere with an individual's habitual behaviour patterns, which could have resulted in a skewed depiction of policy compliance. The next section provides more detail on questionnaires, paying particular attention to the pros and cons of the self-administered type.

3.6.4 Administering questionnaires

Questionnaires can either be self-administered, or administered to respondents by a trained researcher face-to-face or by telephone (Andres, 2012; Czaja and Blair, 1996; Dillman, 2008). The questionnaire in this study was self-administered by public buyers. This choice was dictated by several factors. The first was available resources. The financial costs and labour demands of directly administering a questionnaire to a geographically dispersed population (or population sample) of public buyers would have been prohibitive. Resource constraints are, in most cases, the reason why researchers choose the self-administered option (De Leeuw, 2008;

Hall and Hall, 1996). The opportunity to disseminate the questionnaire electronically made the efficiency rationale for using the self-administered approach even stronger in this study (see section 3.10). The use of self-administered questionnaires also meant that respondents were afforded a degree of confidentiality and anonymity in responding. The less intrusive nature of self-administered questionnaires is believed to be conducive to reducing respondent bias in comparison to face-to-face or telephone surveying (Fowler, 1993). Self-administered questionnaires do have some weaknesses. Average response rates are lower than directly administered questionnaires (Bourque and Fielder, 1995; De Leeuw, 2008). Researchers have minimal oversight or control over how the questions are answered or by whom, which can have implications for the quality of data obtained (Fowler, 1993; Hall and Hall, 1996). Self-administered questionnaires are also unsuitable where researchers want to ask open ended questions (De Leeuw, 2008; Moser and Kalton, 1985). The next section discusses design issues around the questionnaire used in this study.

3.7 Questionnaire design

Two considerations should be foremost in the minds of researchers when designing a self-administered questionnaire. The first is the need to achieve an adequate response rate. It is imperative that sufficient numbers of individuals who receive the questionnaire feel able and willing to complete it. The reason for this is simple. Poor response rates increase the likelihood of non-response error (Dillman, 2007; Gomm, 2008; Moser and Kalton, 1985). Non-response error occurs when statistical generalisations are made based on respondents who are not representative of the population from which they are drawn. As stated in section 3.6.1, the purpose of conducting a survey is to be able to make defensible generalisations. Having only a limited number of responses with which to test a model can also lead to low

predictive power and inaccurate size effect estimates (Frohlich, 2002). The second consideration is ensuring that survey measures are valid and reliable. Measures of dubious validity and reliability pose a ‘measurement error problem’ for researchers (Denscombe, 2002; Dillman, 2007). The scientific value of a study is compromised as a result. Primarily because of these two threats – non-response error and measurement error – it is advisable to dedicate time and forethought to questionnaire design aspects¹⁹. By doing so the probability of obtaining high quality data in sufficient quantity increases (Melnik et al., 2012). Sections 3.7.1-3.7.2 delve into the major points of questionnaire design and their application in this study.

3.7.1 Best practice in questionnaire design

Clarity over what needs to be measured is the starting point for designing a questionnaire (Kane, 1991). Everything else flows from it – question content, question type and questionnaire length. In writing survey questions the following points are recommended (Andres, 2012; Bourque and Fielder, 1995; Converse and Presser, 1986; Czaja and Blair, 1996; Fink, 1995; Fowler and Cosenza, 2008). Firstly, the language used in the questionnaire should be kept simple. The concepts referred to in the questionnaire need to be commonly understood. Care is needed to avoid statements that are leading, jargon-laden, double-barrelled or ambiguous. The same principles apply to devising response categories. Each answer statement should be worded simply and precisely (Bourque and Fielder, 1995). Answers within a response set should be mutually exclusive and anticipate all likely responses (Fowler and Cosenza, 2008). How questions and response categories are phrased and presented have direct implications for both the reliability of the survey instrument and for the validity of the survey findings (see section 3.8). The layout of the

¹⁹ Population coverage error and sampling error can also threaten the integrity of a survey-based study. They were not applicable in this study as the entire population of public buyers in Ireland was surveyed.

questionnaire also matters (Kane, 1991). It should be aesthetically pleasing, easy for respondents to navigate, have section demarcations and provide instructions for completion. The overriding goal is to develop a set of questions that every respondent will interpret in the same way, and be able and willing to answer (Dillman, 2007).

Several other aspects of questionnaire design deserve mention. The number of questions included should be kept to a minimum. All the evidence points to questionnaire length as significantly and negatively related to final response rate (Deutskens et al., 2004; Dillman, Sinclair and Clark, 1993). If at all possible, respondents should be given the opportunity to fill out the questionnaire without having to disclose their identity. Again, the evidence indicates that anonymity increases willingness to respond (Jobber and O'Reilly, 1998; Michaelidou and Dibb, 2006). In the questionnaire and accompanying correspondence an appeal to respondent goodwill and/or professional expertise is advisable (Dillman, 2007; Moser and Kalton, 1985). Targeted individuals need to be persuaded and motivated to participate. The rationale for the survey should also be explained to respondents and the entity behind it identified (Bourque and Fielder, 1995). When the questionnaire has been assembled in draft form, the next step is to pre-test it with selected academic experts and 'cultural insiders' i.e. individuals from the targeted population (Converse and Presser, 1986; Czaja and Blair, 1996; Dillman, 2007). Pre-testing is a form of quality control. It enables researchers to gauge if their questions make sense, if the response categories are comprehensive enough and if the research topic is interesting to targeted respondents. Feedback received can then be used to revise and improve the draft questionnaire.

3.7.2 Questionnaire design in this study

The best practice guidelines covered in section 3.7.1 were followed in designing the questionnaire for this study. The aim was to create a questionnaire that would achieve an adequate response rate and generate a reliable and valid dataset. The former is important to guard against non-response error while the latter reduces the likelihood of measurement error. A number of points are of note in this respect. To encourage response an appeal was made to respondents' goodwill and professional insight. The introduction to the questionnaire stated that respondents' experiences and opinions were needed to help policy makers and researchers better understand the workings of the public procurement system in Ireland. The questionnaire was also kept relatively short and was designed not to impinge on respondents' time. Pre-testing indicated that the survey would take no more than 15 minutes to complete²⁰. Questions were kept brief and purposeful. Jargon and technical language was avoided. Only closed questions were used. Respondents answered each question by selecting from a pre-defined list of options. No typing was required to complete the questionnaire. All questions could be answered without respondents having to consult organisational literature. These steps were taken to undergird the reliability and validity of the measures.

The questionnaire was designed, formatted and managed using *SurveyMonkey*, which is a dedicated survey software package (see Appendix B). Questions were grouped into coherent sections. Each section appeared as a new e-page. Respondents were able to observe their progress and get a sense of how many questions they had left to answer. There was no obligation on respondents to disclose any personal

²⁰ Subsequent analysis of survey responses revealed that most respondents spent 10-15 minutes completing it.

details or identify themselves or their organisation. Providing anonymity was crucial as the focus of the research was on compliance with government policies. The collaboration of Dublin City University (DCU) and the Office of Government Procurement (OGP) in conducting the survey was also highlighted with a view to enhancing the perceived credibility and authenticity of the survey. University involvement in survey research is suggestive of impartiality and scientific rigour (Jobber and O'Reilly, 1998; Sheehan, 2001) while the sponsorship of a government organisation signifies officialdom. Consistent with recent survey-based studies in the procurement field (Pemer et al., 2014), all questionnaire items were reviewed by a panel of academic scholars, public buyers and policy officials within the OGP (see Appendix C). Members of the panel individually scrutinised the proposed operationalisation and measurement of each variable. Following their recommendations some questions and response statements were re-phrased and a new control variable was added. By the time the final version of the questionnaire was distributed it had gone through a series of iterations.

3.8 Effective survey measurement

In survey-based research answers to questions are used as measures of the constructs researchers are investigating (Denscombe, 2002; Fowler, 1993, 1995; Fowler and Cosenza, 2008). The measure of a construct is only as good as the question on which it is based. For measures to be 'good' they need to be both reliable and valid. Reliability in the context of survey research refers to consistency. Specifically, it refers to 'the extent to which a test would give consistent results if applied by different researchers more than once to the same people under standard conditions' (Hall and Hall, 1996:44). Validity approximates to ideas around what is valid or true. For survey questions to be valid they should measure what the researcher intends

them to measure and not something else (Hall and Hall, 1996; Weller and Romney, 1988). While validity has a number of dimensions to it, including content validity, construct validity and criterion validity, the common thread is the appropriateness of a measurement instrument for capturing the object of interest (Lavrakas, 2008). The survey literature suggests a number of techniques to strengthen the reliability and validity of survey questions. How these techniques were put into practice in this study is made clear in sections 3.8.1-3.8.4.

3.8.1 Measurement reliability

Fowler (1993) makes several recommendations for improving the reliability of survey questions. Firstly, it is essential that the questions put to respondents are identical in their form and content. Variation in what is asked or how it is asked can elicit different answers, which compromises the reliability of the survey. The use of a self-administered questionnaire in this study that was standard for all respondents obviated this threat to reliability. Secondly, it is necessary that all research participants interpret what is being asked of them in the same way. This is supported to the extent that survey questions are clearly worded and use concepts readily understood by the target population. The survey questions in this study were written in simple, concise English. They were purposeful and only referred to issues around procurement in a public sector context. Another aspect to upholding the reliability of survey questions according to Fowler (1993) is to standardise expectations for the type of acceptable response. That is, respondents should have the same perception of what counts as an adequate answer to any given question. The most effective means to achieve this is to furnish respondents with a predefined list of answers, which was the strategy employed here. All survey questions were closed, meaning respondents could only select their answer from a set list of options presented to them.

3.8.2 Measurement validity: objective measures

Validity is a concept designating an ideal state that researchers should strive to achieve (Brinberg and McGrath, 1985; Campbell and Fiske, 1959). When using the survey method the challenge of establishing measurement validity varies by question type. Validation is relatively straightforward in the case of objective questions that relate to the observable and confirmable attributes of an individual or organisation (Sapsford, 2006). The validity of objective questions is supported by keeping them intelligible, ensuring that there is a reasonable probability that targeted respondents will be able to answer them, and limiting reporting of responses to the recent past (De Vaus, 1991; Dillman, 2007; Fowler, 1993). Every effort was made to put this advice into practice. As stated in section 3.7, clarity and simplicity guided the design of each survey question. Only questions that respondents were assumed to be capable of answering with confidence were included. Illustrative of this situation, it was originally intended to question respondents on the total number and value of contracts awarded to SMEs in the previous 12 months. In the pre-test phase it was pointed out by an experienced public buyer that many respondents would struggle to answer this question with any degree of precision or would not have this information available to them; hence its exclusion from the final version of the questionnaire.

3.8.3 Measurement validity: subjective measures

Questions aimed at eliciting individuals' beliefs and attitudes present greater validation challenges (Sapsford, 2006). This is because there is no external referent against which answers can be validated. Referred to in section 3.7.2, an expert review panel made up of academics and practitioners scrutinised the questionnaire instrument, including the content validity of subjective measures. Expert assessment acts as a litmus test of the validity of survey questions (Campanelli, 2008; LeCompte and Goetz, 1982; Lincoln and Guba, 1985). The panel made a number of valuable

recommendations for improving the content validity of the subjective measures. Based on their advice changes were made to the phrasing of several opinion and belief statements. As one example, a statement in the questionnaire draft originally read ‘facilitating SME participation in contract competitions is consistent with other procurement goals’. The recommendation made by several of the experts was to make explicit the ‘other procurement goals’. For the final version of the questionnaire the statement was changed to read ‘facilitating SME participation in contract competitions is consistent with optimising value for money and complying with EU law’. The fact that the questions were subjected to external validation should instil a degree of confidence that findings from the study are credible and have scientific merit.

3.8.4 Measurement validity: social desirability bias

An additional threat to validity occurs when responses deviate from their true value. This is a particular problem when issues that are sensitive to the targeted population are being investigated. Under such circumstances respondents are liable to resort to impression management and supply answers that they consider to be ‘socially desirable’ but that do not reflect their true behaviours or opinions (Bertrand and Mullainathan, 2001; Fowler and Cosenza, 2008). Against this, a review of survey literature by Chan (2009) indicated that socially desirable or ‘fake’ answering is neither as ubiquitous nor as problematic as is sometimes assumed. Given that the focus of this study was on policy compliance, the prudent course of action was to pre-empt the threat of social desirability bias. A number of tactics were adopted for this purpose (Fowler, 1995). No reference was made to compliance at any stage throughout the questionnaire. The language employed was neutral and studiously avoided giving the impression that there was a preferred answer to any of the

questions. The questionnaire was self-administered, which allowed respondents to report on their behaviours without having to disclose them in person to a third party. Respondents were also able to participate in the survey while remaining anonymous. Together these tactics aimed to minimise the gap between the actual and reported behaviours of survey respondents and, in the process, uphold the validity of the compliance measures. This completes the discussion on effective survey measurement. The survey population comes under the microscope next.

3.9 Survey population

Public buyers in Ireland served as the survey population of interest. Section 3.9.1 explains how the public buyer population was delimited. E-procurement is relevant here. By virtue of Ireland having a national e-procurement portal it was possible to identify all public sector employees involved in purchasing goods and services on behalf of their organisations, thus yielding a population with which to work. Justification for using public buyers as respondents is given in section 3.9.2. Included here is the appropriateness of having public buyers report their compliance with SME-friendly procurement policy; precedent in using public buyers as respondents; and problems with examining compliance at the organisational level. The limitations of using public buyers as survey respondents are dealt with in section 3.9.3. Primarily, in privileging public buyers' input the voices of other procurement actors, such as suppliers and elected representatives, are omitted. Weaknesses with self-reported data and an inability to control for the possibility of two or more individuals from the same public sector organisation submitting responses are also conceded. These and the other points will now be examined in more detail.

3.9.1 Delimiting the survey population

The population of public buyers was taken to comprise the approximately 3000 individuals who were registered on Ireland's national e-procurement portal www.etenders.gov.ie at the time of the survey²¹, hereafter referred to as *eTenders*. Irish national procurement guidelines stipulate that all public sector contracts valued at €25,000 or more have to be advertised on *eTenders*. The effect is that all public buyers in Ireland are registered and active on *eTenders*. Among the main challenges that researchers have had to contend with is pinpointing the individual(s) responsible for procurement in any given public sector organisation²². Migration to e-procurement, and the resulting database of active public buyers which it yields, is helping researchers to surmount this problem. Essentially it means that researchers can more easily identify and survey a national population of public buyers, or a sample thereof. Permission to access the *eTenders* population database was granted by the OGP. Their co-operation and backing was indispensable to the success of the study. Without it, surveying Ireland's national population of public buyers would have proved all but impossible.

3.9.2 Justification for using public buyers as respondents

Reliance on public buyers as the survey informants can be defended on a number of grounds. The first is suitability to the aim of the study. Public buyers are responsible for putting SME-friendly policy into practice. On this basis they are the logical respondent choice when investigating compliance with SME-friendly policy in public procurement. The second is that 'public buyers often operate with unique procurement authority that is separated from their direct line of supervision' (Hawkins, Gravier and Powley, 2011:577). Hence, it makes sense to directly engage

²¹ Source: OGP, Ireland.

²² Access has been less of a problem for researchers in the US owing to the existence of the National Institute of Government Purchasing. It has a database of 15,000 public buyer professionals.

with them. The third is the configuration and management of the procurement function in public sector organisations. It is quite common for procurement responsibility to be dispersed across departments and to be delegated to many individuals and teams (Flynn et al., 2013; Thai, 2001). As a result, there is not always a single, coherent procurement culture or set of practices that exist and that can be measured at organisational level. Owing to such circumstances surveying actors at the sub-organisational level is, arguably, the more effective means of capturing what happens in practice. Using public buyers as respondents also responds to calls to examine institutional effects at organisational sub-unit level (Hirsch, 1997; Pache and Santos, 2010). Institutional research has tended to fixate on the corporate level and ignore the intra-organisational dynamics of institutional responses.

Research precedent was another reason for preferring public buyers as respondents. Public buyers feature prominently as informants in procurement research and, more so again, have been used in several studies on procurement compliance. Karjalainen and van Raaij (2011) investigated ‘maverick’ purchasing practices in the Finnish public sector by surveying approximately 3000 public sector employees with responsibility for procurement. Gelderman, Ghijsen and Brugman, (2006) and Mwakibinga and Buvik (2013) pursued the same strategy in Dutch and Tanzanian contexts respectively. Preuss and Walker (2011) also highlighted the desirability of probing not only on what organisations are doing in sustainable purchasing but also what individual public buyers themselves are doing. As they reasoned, public buyers employ their own strategies based on their unique set of abilities, motivations and prerogatives. This chimes with previously made arguments by Nord and Fox (1996) on the need to re-centre the individual in organisational studies and to row back from

a preoccupation with meso-level analysis. Practical considerations to do with access and resource constraints also had a role to play in selecting public buyers. Already mentioned, the researcher was granted unique access to the *eTenders* database by the OGP. This meant that a large scale survey could be undertaken without incurring any significant financial or labour costs.

3.9.3 Limitations of using public buyers as respondents

Selecting public buyers as respondents is not without its drawbacks. Their inclusion comes at the expense of other public procurement actors. Suppliers' opinions and experiences of SME-friendly policy were not captured, nor were those of public sector managers, service end-users, policy makers or elected representatives. Murray (2009b) has been critical of just this situation, lamenting the fact that public buyers are frequently favoured as informants while the voices of suppliers and political actors are heard much less. A second issue concerns the nature of the data. Like studies on procurement rule compliance, self-reported behaviours were used here to measure compliance (Gelderman, Ghijsen and Schoonen, 2010; Mwakibinga and Buvik, 2013). Non self-report measures of behaviour were not obtained. The validity of self-reported data has been a point of contention for many years and the threat of social desirability bias it carries can never be discounted (Campbell and Fiske, 1959). Provisos notwithstanding, Chan (2009) has argued that there is no evidence to indicate that it is inherently flawed, or that the criticisms made of it do not equally apply to ostensibly 'objective' measures. Lastly, in surveying public buyers it was not possible to identify and control for two or more responses originating from the one public sector organisation.

3.10 Survey implementation

The implementation phase of survey-based research is just as important as the design and construction of the questionnaire instrument (Dillman, 2007). Successful implementation can make all the difference in securing an acceptable response rate and having a high quality data set to work with. It is equally crucial from the perspective of successfully executing a research project on time and within budget. The implementation of the survey in this study was internet-based. All correspondence with the public buyer population was conducted via email. The questionnaire was accessed by respondents clicking on a web-link. Section 3.10.1 explains why e-surveying was the most efficacious choice for this study; efficacious in terms of working within resource constraints as well as securing an acceptable number of responses. The downsides to using e-surveying are enumerated in section 3.10.2. These include lower response rates relative to the traditional postal method and, relatedly, respondent fatigue and antipathy that have grown up around e-surveys. The third and final sub-section provides details on the timeline of the survey and the steps that were taken to manage its successful implementation.

3.10.1 Justification for e-surveying

Public buyers were surveyed electronically in this study. Apart from access, the e-survey approach made sense in resource terms; the latter being a critical factor when deciding on research strategies (Bourque and Fielder, 1995; Czaja and Blair, 1996). Trials have consistently shown that e-surveying costs a fraction of the traditional mail method (McDonald and Adam, 2003; Schreckhise, 2005; Shannon and Bradshaw, 2002; Shough and Yates, 2002; Weible and Wallace, 1998). In this study the financial cost incurred in distributing the questionnaire amounted to no more than the subscription fee to *SurveyMonkey*. Posting hard copy questionnaires to 3000 public buyers at two separate time periods would have resulted in significant

financial costs. As well as being more cost effective, e-surveying enables quicker turnaround times compared to the traditional postal method (Kwak and Radler, 2002; McDonald and Adam, 2003; Michaelidou and Dibb, 2006). The survey of public buyers was completed within two weeks (see section 3.10.3). The traditional mail method would have taken significantly longer. E-surveying is also labour and time saving. Most e-survey products are compatible with statistical software packages and allow data to be seamlessly transferred from the former to the latter. This relieves researchers of the time-consuming task of entering hundreds of cases manually. The dataset generated from the survey in this study was able to be downloaded as an *SPSS* file for analysis.

Apart from efficient use of resources, e-surveying has much to recommend itself from the perspective of respondent convenience (Manfreda-Lozar and Vehovar, 2008). In this study e-surveying meant that the questionnaire was delivered directly to the electronic mailbox of each public buyer. The return of the questionnaire demanded nothing more than the click of a mouse on the part of the respondent. E-surveying also affords individuals greater flexibility over when and where they complete the questionnaire, which can be seen as advantageous for boosting response rates. Supportive of this point, subsequent analysis of response patterns revealed that some respondents completed the questionnaire very early in the morning or late in the evening. Much of the work of public buyers is now done online. Partaking in an online survey should, in theory at least, be something that most public buyers feel comfortable and confident in doing. There is also reason to believe that e-surveying is conducive to generating better quality data than paper-based methods. As evidence of this, several studies have reported that e-surveys generate higher levels of response completeness than mail surveys, measured in

terms of the percentage of questions answered, (Kwak and Radler, 2002; McDonald and Adam, 2003; Truell, Bartlett and Alexander, 2002).

3.10.2 Limitations of e-surveying

Against the advantages listed above, e-surveying does have some limitations. Comparisons of postal and e-survey response rates have in nearly all cases found that the former outperform the latter by a ratio of between two-three to one (Jones and Pitt, 1999; Mavis and Brocato, 1998; McDonald and Adam, 2003; Ranchhod and Zhou, 2001; Schuldt and Totten, 1994). Truell, Bartlett and Alexander (2002) were among the few exceptions, reporting no significant difference in final outcome between the two modes of transmission. Response rates to e-surveys have also been in steady decline since their introduction (Sheehan, 2001). Among the reasons for this is wariness around unsolicited email and the sheer volume of research requests that professionals receive via email. Because of the exponential growth in their use and the relative ease of creating and distributing them, e-surveys are said to be received less favourably than mailed questionnaires (Ranchhod and Zhou, 2001). Another problem is e-surveys failing to deliver to intended respondents due to incorrect email addresses and spam filters (Lynn, 2008; Manfreda-Lozar and Vehovar, 2008; Yun and Trumbo, 2000). Concerns have been raised that e-surveying impinges on the privacy and online security of individuals (Cho and Larose, 1999). Caveats aside, e-surveying was by far the most efficient method, making it possible to reach a population of geographically dispersed individuals in a cost effective way.

3.10.3 Survey timeline

The survey was conducted over a two-week time period at the beginning of 2015. On Monday, January 19th an email notification with an embedded link to the questionnaire was distributed to public buyers (see Box 2). A second email, also with

an embedded hypertext link, was issued on Wednesday, January 28th. There is widespread consensus that following-up with the target population after the initial contact is among the most effective ways to increase the final response rate (Cook, Heath and Thompson, 2000; Duncan, 1979; Jobber and O'Reilly, 1998; Oliphant and Brady, 2006; Sheehan, 2001). Follow-up correspondence helps to jog the memory of individuals who intend to participate but have not got round to doing so (Dillman, 2007). The survey closed on Monday, February 2nd. A fourteen day time period with two separate email contacts was deemed sufficient to generate an adequate response rate. Throughout this time period the survey was regularly monitored to ensure that it was running smoothly. The pattern of response activity was one in which most questionnaires were filled out within 24 hours of their release. The frequency of response activity reduced significantly outside of this period. This is consistent with how respondents have been shown to behave in other e-surveys (Jones and Pitt, 1999; Shannon and Bradshaw, 2002; Yun and Trumbo, 2000).

Box 2 Survey request emailed to public buyers

Dear Public Buyer,

The Office of Government Procurement in conjunction with Dublin City University (DCU) is undertaking a survey of public procurement. We kindly ask that you participate by clicking on the link below. The survey takes no more than 15 minutes to complete.

Thank you in advance for your input. It is much appreciated.

Public buyer survey
<https://www.surveymonkey.com/s/Buyers2015>

3.11 Research context

Ireland served as the research setting for the survey. Recent years have witnessed successive Irish government policy initiatives to promote greater SME involvement in public procurement. The process began in earnest in 2007 with a consultation document entitled *Improving SME Access to Public Procurement* (National Public Procurement Policy Unit, 2007). It canvassed the opinions of SME representative bodies and public sector organisations on how to create a mutually beneficial public tendering system. Thereafter followed three major policy guidance documents: *Using Public Procurement to Stimulate Innovation and SME Access to Public Contracts* (Procurement Innovation Group, 2009), *Facilitating SME Access to Public Procurement* (Department of Finance, 2010) and *Initiatives to Assist SMEs in Public Procurement* (Department of Public Expenditure and Reform, 2014). The first of these recommended opening up public procurement to innovative supply solutions and making it easier for small firms to compete for contracts. The second contained a list of ‘positive measures’ public buyers were requested to comply with in order to better accommodate SMEs in contract competitions. These same measures were reiterated in *Initiatives to Assist SMEs in Public Procurement* in 2014. We will now look at three of the main trends and events that have propelled SME-friendly procurement policy in Ireland: joined-up policy making; European Commission policy guidance; and the international financial crisis of 2007.

3.11.1 Joined-up policy making

Irish efforts to increase SME involvement in public procurement have come about ‘in the context of promoting whole of government objectives’ (National Public Procurement Policy Unit, 2007:1). ‘Promoting whole of government objectives’ means that policies should be designed and implemented mindful of the economic, enterprise, social, environmental and overall democratic goals set down by

government (Christensen and Laegreid, 2007). The philosophy behind it is that synergies in governance can be achieved when policies dovetail. In Irish public procurement ‘promoting whole of government objectives’ has manifested itself primarily in enterprise policies. Exemplifying this inter-connection, public procurement is presented in *Sharing our Future* as ‘a major opportunity for Ireland to advance its highest priority policy goals’ (Forfas, 2009:18). The same report then goes on to explain how this can be realised, such as by public sector organisations and innovative suppliers working in concert to develop technological solutions to public service challenges. A contemporaneous report, *Making it Happen: Growing Enterprise for Ireland* (Forfas, 2010) underlines the potential for public procurement to be used as a demand-side stimulant to innovation. *The Voice of Small Business* report talks of harnessing public procurement in the interests of professionalising the SME sector (Advisory Group for Small Business, 2011). These examples give some idea of how the SME-friendly agenda in public procurement has come about in tandem with more expansive, joined-up thinking on policy management.

3.11.2 European Commission policy guidance

The European Commission has also acted as a driver of procurement reform in Ireland. Ever since the creation of the Single Market the European Commission has been proactive in promoting SME-friendly public procurement among EU Member States. Support has come in the form of information and training provision for SMEs and the publication of guidance material for public buyers on how to ensure equality of opportunity in the procurement marketplace (European Commission, 1989, 1990, 1992). In 2008 the European Commission published a *European Code of Best Practices Facilitating Access by SMEs to Public Procurement Contracts* (European Commission, 2008c). Its purpose was to ‘provide Member States and their

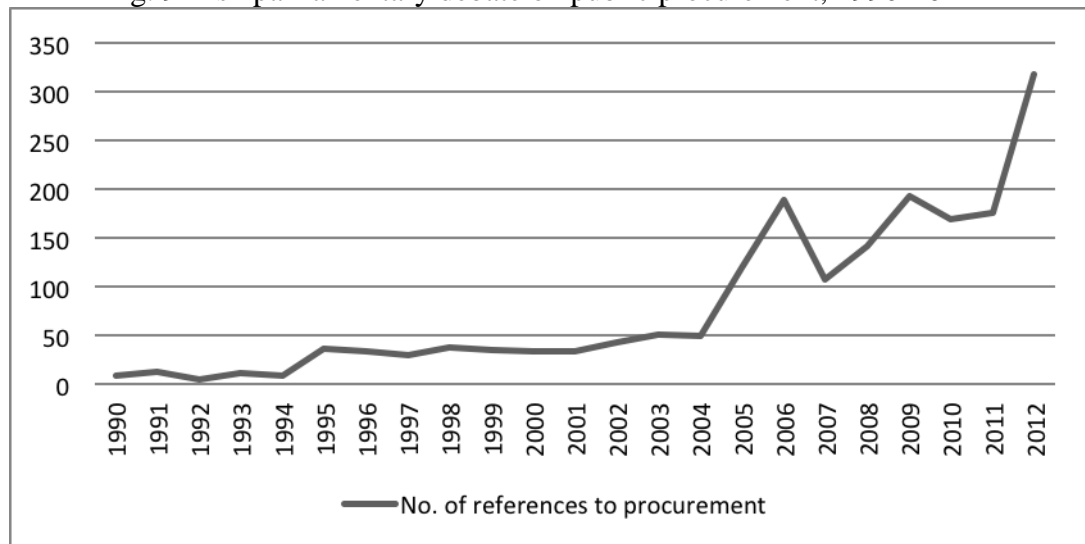
contracting authorities with guidance on how to apply the EC legal framework in a way which facilitates SMEs' participation in contract award procedures' (2008:2). The imprint of the *Code* is unmistakable in Ireland's own SME-friendly procurement policy initiatives. Most of the original recommendations made in the *Code* were subsequently incorporated into *Facilitating SME Access to Public Procurement* (Department of Finance, 2010). The European Commission's policies and communiques over the last two decades have exerted institutional pressure – coercive, normative and mimetic - on Ireland and all other EU Member States to make their public procurement systems more accessible to SMEs. This has led to national public procurement systems becoming isomorphic with one another.

3.11.3 Macroeconomic shock

Unfavourable macroeconomic events have also been behind the emergence of SME-friendly procurement policies. Resulting from the international financial crisis of 2007 Ireland suffered a sharp reversal in its economic fortunes. GDP fell by over 8 per cent, unemployment rose to almost 15 per cent, and the current account deficit grew to 5.7 per cent of GDP (Woods and O'Connell, 2012). The financial crisis and subsequent economic recession hit small firms the hardest. Between 2007 and 2010 employment in Irish SMEs fell by 15 per cent, final output decreased by 18 per cent and SMEs' overall economic contribution dropped from 53 per cent to 48 per cent (European Commission, 2011a). There was also a sharp drop in new enterprise creation and an unwelcome rise in the number of existing enterprises that ceased trading (Central Statistics Office, 2014). It was these less than propitious economic circumstances that catalysed efforts to reform public procurement and, in particular, to make it more facilitative of SME suppliers. Indicative of this turn of events, the then Minister for Finance, Brian Lenihan, referred to 'the importance

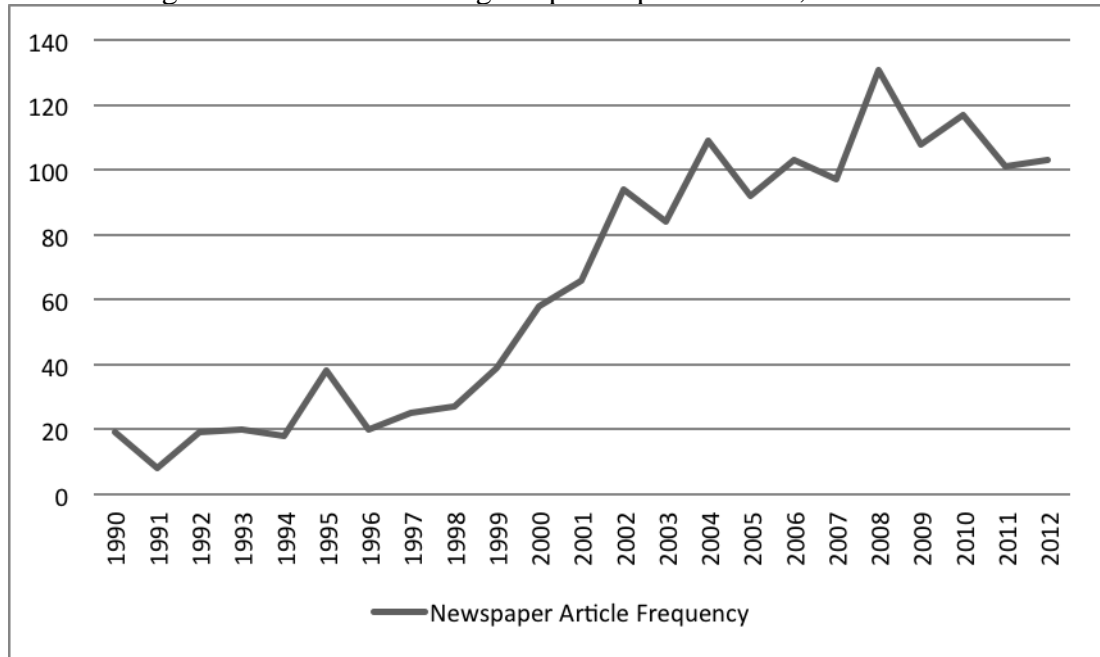
of public contracts as a source of business for SMEs’ and stated that he was ‘anxious to promote their participation to the greatest extent possible under EU law’ (Dáil Éireann Debate, 2009). During this same time-period there was a spike in parliamentary debate on public procurement, as there was in media coverage of it (see Fig. 9-10). These can be taken as indicators of its political, economic and social salience in Ireland around this time. Having covered the research context, the chapter now turns to clarifying how the concepts in the study were operationalised and measured. The first of these is compliance with SME-friendly procurement policy.

Fig. 9 Irish parliamentary debate on public procurement, 1990-2012²³



²³ The number of times procurement was mentioned in parliamentary debate in each year between 1990 and 2012 is used as a proxy measure of political interest in public procurement.

Fig. 10 Print media coverage of public procurement, 1990-2012²⁴



3.12 A compliance index for SME-friendly procurement

To measure compliance with SME-friendly procurement an index was created especially for the purposes of this study. Nothing of this kind existed in the literature. The index comprises all the recommendations or ‘positive measures’ contained in current Irish SME-friendly procurement policy²⁵. A total of 19 individual recommendations make up the index. While not legally binding, Irish public buyers are expected to comply with these recommendations by giving effect to them in their everyday procurement practices. Previously averred to, the procurement policy landscape is relatively homogeneous across the EU. The policy recommendations that comprise the index are typical of those found in other developed economies. This is significant as it means that the index can, with some modifications, be used to test compliance with SME-friendly procurement in other EU Member States (see section 5.3.3). The 19 measures in the index are grouped into seven categories (see

²⁴ The number of times procurement was mentioned in *Irish Times* articles in each year between 1990 and 2012 is used as a proxy measure of media interest in public procurement.

²⁵ As at the end of 2014.

Table 12, pg. 182). Each of these corresponds to a facet of public sector tendering that SMEs are known to struggle with, including: opportunity awareness; access to competitions; bureaucracy; contract size; qualification criteria; liability of newness; and information deficits. These categories and their constituent measures are described in more detail in sections 3.12.1-3.12.7.

Table 12 Compliance index for SME-friendly procurement

<p>Making contract opportunities visible</p> <ul style="list-style-type: none"> ▪ <u>Measure 1 Online advertising</u> contracts for supplies and general services with an estimated value of €25,000 or more and works contracts with an estimated value of €50,000 or more should be advertised on <i>eTenders</i> ▪ <u>Measure 2 Prior Information Notices (PINs)</u> buyers should communicate long-term purchasing plans to the market as early as possible by publishing PINs
<p>Widening access to opportunities</p> <ul style="list-style-type: none"> ▪ <u>Measure 3 Open tendering procedure</u> buyers should use open (competitive) tendering for contracts worth up to €134,000 for goods and services contracts and €250,000 for works contracts ▪ <u>Measure 4 Qualification criteria</u> buyers should use broadly defined qualification criteria in order to increase the number of eligible tenderers
<p>Alleviating the administrative burden</p> <ul style="list-style-type: none"> ▪ <u>Measure 5 Self-declare financial capacity</u> buyers should allow applicants to self-declare their financial capacity, and should seek evidence of capacity only in the event of the tenderer being short-listed or coming under consideration for the contract ▪ <u>Measure 6 Self-declare insurance cover</u> buyers should allow applicants to self-declare their insurance cover, and should seek evidence of cover only in the event of the tenderer being short-listed or coming under consideration for the contract ▪ <u>Measure 7 Standard tender documents</u> buyers should use standard documentation and tender templates ▪ <u>Measure 8 Online tender submission</u> buyers should promote the online submission of tenders by suppliers as the norm
<p>Overcoming difficulties relating to contract size</p> <ul style="list-style-type: none"> ▪ <u>Measure 9 Dividing contracts into lots</u> buyers should consider dividing contracts into lots where appropriate and practical ▪ <u>Measure 10 Openness to SME consortium bidding</u> buyers should be open to consortium bids by, for example, drawing attention to this possibility in the contract notice and/or by publishing PINs

<ul style="list-style-type: none"> ▪ <u>Measure 11 Framework agreements</u> <p>buyers are to ensure that, where possible, the terms of framework agreements facilitate the inclusion of small firms</p>
<p>Proportionality in the use of criteria</p> <ul style="list-style-type: none"> ▪ <u>Measure 12 Proportionate turnover requirements</u> <p>buyers should not set company turnover requirements at more than twice the estimated contract value for routine goods and services competitions</p> <ul style="list-style-type: none"> ▪ <u>Measure 13 Proportionate insurance requirements</u> <p>buyers should only require types and levels of insurance that are proportionate and reasonable in the context of the contract (types and limits specified in policy guidance)</p> <ul style="list-style-type: none"> ▪ <u>Measure 14 Flexible over proof of financial capacity</u> <p>buyers should be flexible over the type of proof of financial capacity they accept from tenderers</p>
<p>Openness to new suppliers/solutions</p> <ul style="list-style-type: none"> ▪ <u>Measure 15 Market analysis</u> <p>buyers should undertake market analysis prior to tendering in order to better understand the supply marketplace and what it can offer</p> <ul style="list-style-type: none"> ▪ <u>Measure 16 Variants to specifications</u> <p>buyers should indicate where they are prepared to accept reasonable variants to the specifications of the goods/services sought</p> <ul style="list-style-type: none"> ▪ <u>Measure 17 Life cycle costs</u> <p>buyers should take into account whole life-cycle costs associated with a purchase</p>
<p>Addressing information asymmetries</p> <ul style="list-style-type: none"> ▪ <u>Measure 18 Feedback for tenderers</u> <p>buyers should provide written feedback as a matter of good practice and in fulfilment of their obligations under the EU Remedies Directive 2007/66/EC</p> <ul style="list-style-type: none"> ▪ <u>Measure 19 Publication of award notices</u> <p>buyers are required to publish all contract award notices over €25,000 on <i>eTenders</i></p>

3.12.1 Making contract opportunities visible

Identifying public sector contract opportunities is known to be problematic for SMEs. Difficulties have been expressed by them over lack of awareness of available opportunities and gaining entry onto approved supplier lists (Loader, 2005). The smaller the firm the more problematic these issues around contract identification appear to become (Karjalainen and Kemppainen, 2008). Irish policy prescribes two measures that are designed to make it easier for SMEs to identify contract opportunities relevant to their business. The first stipulates that public buyers should advertise supplies and works contracts above certain thresholds on *eTenders*. This measure is aimed at ensuring that contracts are visible, searchable and easily identifiable. It also means that there is a standard, consistent procedure for the advertising of public contracts. The second measure recommends that public buyers publish PINs on *eTenders*. The publication of PINs alerts the marketplace to the opportunities that are likely to arise in the near future with particular organisations. PINs are understood to give SMEs time to plan ahead, prepare their bid strategies or even form a bid consortium. Advance notification is hugely beneficial to SMEs because with their limited human resources they often struggle to compile a tender at short notice (Peck and Cabras, 2010).

3.12.2 Widening access to opportunities

As well as problems around contract identification SMEs do not always get the chance to compete for business with the public sector (Erridge, 1998; Loader, 2013). Restrictive tendering conditions set by the procuring organisation are a primary cause of this problem. A typical case would be stipulating that eligible tenderers must satisfy minimum requirements relating to experience and have a proven record of supplying public sector organisations. Two policy measures are aimed at

counteracting this problem. The first is for public buyers to use the open procedure of competitive tendering for supply contracts valued at below €134,000 and works contracts valued at below €250,000. Open tendering means that public buyers should not pre-qualify firms before issuing a request for tender. In this way all interested firms at least have the chance to compete for the contract on offer and be evaluated against the assessment criteria. The second measure relates to the qualification and assessment criteria used. Public buyers are requested not to unduly limit the field of potential suppliers by relying on a too restrictive set of criteria. Invariably, this militates against the prospect of small and newly established firms becoming suppliers. Notably, narrow bid specifications have been reported by firms as hindering their participation in the public procurement marketplace (Loader and Norton, 2015; MacManus, 1991).

3.12.3 Alleviating the administrative burden

The administrative burden associated with tendering can have a dissuasive effect on SMEs' inclination to compete (Bovis, 1996; Fee, Erridge and Hennigan, 2002; Flynn et al., 2013). Lengthy form filling and documentation requirements are a drain on SMEs' resources and come with an opportunity cost. Quantifying this effect, recent analysis suggests that it costs firms over £3200 to tender for a routine supply contract in the EU and considerably more in the UK (Centre for Economic and Business Research and Gatewit, 2013). Reducing the administrative burden of tendering is a critical part of facilitating greater SME involvement. Four policy measures are relevant in this regard. The first and second of these measures recommend that public buyers permit firms to self-declare their financial capacity and insurance cover respectively. Proof of same is only to be requested when the firm is in contention for the contract. The third measure recommends the use by public buyers

of standard tender templates²⁶. The rationale for using standard templates is to both increase firms' familiarity with what will be asked of them in the tendering process and reduce variability in the information sought by different public sector organisations. The fourth measure states that public buyers should direct firms to submit their tenders online as a matter of course. This is designed to reduce their transaction costs by making it quicker and easier to submit a tender.

3.12.4 Overcoming difficulties relating to contract size

The large size of public sector contracts is a major obstacle to SMEs' chances of success in public procurement (European Commission, 1992; Kidalov, 2015; Loader, 2013; Smith and Hobbs, 2001). The position taken here is that contract size is *the* biggest barrier to SME involvement in public procurement (see section 3.13). Many of the other commonly cited barriers, such as onerous qualification criteria and risk aversion on the part of buyers, stem from the disparity between the average size of a public sector contract and SMEs' organisational capacity. As contract size reduces, these other barriers are also likely to reduce. Three policy recommendations are designed to address the problem of contract size for SMEs. The first is for public buyers to divide contracts into lots where at all feasible. The division of contracts into lots reduces contracts to a size more appropriate to the organisational capacity of SMEs, particularly micro-enterprises. The second recommendation requests public buyers to be open to SME consortium bids by, for example, stating this in the request for tender. Whereas lots focus on contract size, consortium bidding focuses on augmenting organisational capacity by combining the resources and expertise of two or more small firms. The third recommendation asks public buyers to structure

²⁶ Standard tender templates are issued by the OGP.

framework agreements in such a way that SMEs still have the opportunity to tender for individual lots or, alternatively, act as sub-contractors to larger suppliers.

3.12.5 Proportionality in assessment criteria

Financial capacity and insurance cover thresholds that are misaligned to the value and nature of the contract is a recurring problem cited by SMEs (Ringwald et al., 2009). Disproportionately high thresholds preclude smaller and newly established firms from competing. For this reason it is essential that thresholds are appropriate to the circumstances and risk profile of the contract. Three policy measures aim to uphold the principle of proportionality. The first recommends that public buyers should not set the 'company turnover-to-contract value' ratio at more than twice the estimated value in the case of routine supply contracts. For example, if a contract is valued at €50,000, company turnover of €100,000 should be sufficient to be considered eligible. The second measure specifies insurance indemnity limits for public buyers to defer to when purchasing routine goods and services. Employer's liability should be set at €12.7 million and public liability set at €6.5 million. The third measure recommends that public buyers show flexibility over the type of proof of financial capacity acceptable in contract competitions. This is particularly relevant to new enterprises. By definition they will have a limited financial history. New enterprises can also incur significant start-up costs, which tend to give a misleading impression of their financial status. For these reasons public buyers are requested to be flexible and open-minded when adjudicating on proof of financial capacity.

3.12.6 Openness to new suppliers/solutions

Achieving value for money, by which is meant realising the most economically advantageous outcome, has become something of a mantra in public procurement. Suppliers complain that too much weighting is put on price to the detriment of

product/service quality and innovation (Georghiou et al., 2014; GHK, 2010; Small Firms Association, 2013). This, coupled with a culture of risk aversion and a perceived lack of purchasing professionalism, can adversely affect SMEs' chances of success (Fee, Erridge and Hennigan, 2002; Procurement Innovation Group, 2009). For this reason public buyers are encouraged to become more knowledgeable about what the supply market can offer and more open to new suppliers and supply solutions. A more rounded interpretation of economic value is also promoted as part of moving away from a 'lowest cost is best' mentality (McKevitt, 2015). Three policy measures are relevant in this regard. The first is for public buyers to undertake market analysis prior to formally issuing their tender request. It is only by researching their marketplaces that public buyers can become familiar with the full gamut of supply solutions available. The second recommendation is that they should consider variants to the tender specification where appropriate to do so. This is intended to create the space for suppliers to suggest innovative and potentially more cost-effective solutions. The third recommendation is for public buyers to evaluate the life-cycle costs of their intended purchase. As well as making financial sense for the buying organisation, taking a more balanced and long-term assessment of value is likely to prove favourable to SMEs, as service quality and customer satisfaction are strong selling points for them.

3.12.7 Addressing information asymmetries

The reported experiences of small firms suggest that public sector tendering represents uncharted territory for them (Greer, 1999). The same author also spoke of a 'cultural gap' between the public and private sectors and poor appreciation of each other's requirements. Suppliers have expressed a desire for more open channels of communication with public sector organisations (Cabras, 2011; GHK, 2010) and

for more and better quality information in both the pre- and post-tender phases of contract competitions (Erridge, Fee and McIlroy, 1999; Loader and Norton, 2015). The final two policy measures that comprise the index are geared towards addressing SMEs' information asymmetries in tendering. Public buyers are recommended to provide written feedback to all unsuccessful tenderers. This is in addition to their obligations under the EU procurement law²⁷. The purpose of providing feedback is to inform firms of their performance against the assessment criteria and educate them on where they can improve for future competitions. The evidence indicates that receiving feedback has a positive impact on the quality of suppliers' subsequent tender submissions (Flynn et al., 2013). Public buyers are also requested to publish all contract award notices valued at €25,000 or above on *eTenders*. The purpose of this measure is to promote transparency by letting all interested parties know the final outcome of a competition, including the name of the successful bidder.

3.13 Computing compliance index scores

The previous section explained how an index for measuring compliance with SME-friendly procurement policy was constructed. The computation of compliance scores is dealt with in this section. There were two stages in this process. The first involved operationalising compliance. The preferred approach was to treat compliance as a dichotomous variable. For each of the 19 measures compliance received a score of 1 and non-compliance received a score of 0. The 19 measures were then summed to create a compliance score for each respondent²⁸. Taking this approach was appropriate given the nature of SME-friendly procurement policy. It specifies actions that public buyers are expected to take when procuring goods and services on behalf

²⁷ Directive 2007/66/EC of the European Parliament and of the Council of December 11, 2007 amending Council Directives 89/665/EEC and 92/13/EEC with regard to improving the effectiveness of review procedures concerning the award of public contracts [2007] OJ L335/31.

²⁸ In cases where n values were missing, the final compliance score was made up of 19-n values.

of their organisation. To reiterate the first policy recommendation listed in table 12, public buyers are to advertise all contracts with an anticipated value of €25,000 or more on *eTenders*. To be compliant is to consistently adhere to this stipulation. Not to adhere on one or more occasions equates to non-compliance. Compliance, in this sense, is binary rather than something of degree. Hoejmosé, Grosvold and Millington (2013) and Mansi (2015) utilised the same strategy in measuring sustainable supply chain management practices among firms in the UK and India respectively. Other scholars resist from treating procurement compliance as ‘either-or’, preferring to measure it in terms of degrees of behaviour (Hawkins and Muir, 2014; Gelderman, Ghijsen and Brugman, 2006; Mwakibinga and Buvik, 2013).

3.13.1 Index weighting

The second part to computing compliance scores was the weighting of measures. In constructing any index the question immediately arises as to whether the measures comprising it should be equally or differentially weighted. This is by no means an anodyne question and is liable to affect the outcome of any study (Blanc et al., 2008). Weighting all measures equally assumes equivalence of impact. Some studies adopt this as a default stance due to uncertainty over the relative importance of their measures. Krause (2011), for example, compiled an index of environmentally-friendly practices used by US municipalities in which impact was assumed to be the same in all cases. The disadvantage of equal weighting, as the same author conceded, is that the effect of individual policy measures and the effort required to implement them is unlikely to be uniform. The alternative is to differentially weight index measures. Implied by the name, differential weighting takes account of the varying impacts and relative importance of index measures. Differential weighting comes with its own set of challenges and researchers must have a sound justification for

applying a differential weighting system (OECD, 2008). Even with a defensible rationale, making some value-based judgement is unavoidable (Booyesen, 2002). Owing to this element of subjectivity, transparency on the part of the researcher is crucial. The next two sub-sections describe the weighting system used to compute compliance scores for public buyers.

3.13.2 Differential weightings: empirical evidence

In line with best practice advice offered by Hsu, Johnson and Lloyd (2013) two steps were taken to decide on the optimal weighting system for the policy compliance index. The first involved a review and re-examination of all the available evidence on SMEs and public sector tendering. It revealed that the large size of public sector contracts is the most significant barrier facing SMEs. Evidence for this can be found, for example, in regression analysis undertaken on SMEs' participation and success rates in the European market for public contracts (GHK, 2010). It is also a conclusion reached by prominent public procurement scholars. After performing a systematic literature review Loader (2013) identified contract size as the most frequently cited obstacle confronting SMEs in public procurement; and one likely to become more problematic in the future owing to aggregated purchasing trends. Morand (2003) highlighted contract size as *the* prohibitive factor for SME access to public contracts while Kidalov (2015) instanced contract bundling as a serious and unnecessary obstacle to SMEs' participation in defence contract acquisition in the US. From this it follows that measures aimed at mitigating the contract size barrier are likely to have the most benefit for SMEs if acted on by public buyers. Three measures related to contract size feature in the index: dividing contracts into lots; encouraging consortium bids; and devising framework agreements so that they are inclusive of small firms.

3.13.3 Differential weightings: expert assessment

After reviewing the empirical evidence the second step involved consulting with the same procurement practitioners that appraised the questionnaire instrument. Soliciting expert input on weighting decisions, which is standard in the social and natural sciences, improves the validity and peer acceptability of the index (Booyesen, 2002; Hsu, Johnson and Lloyd, 2013). Asked to rate the relative importance of the 19 measures, the considered opinion of the practitioner experts was that the three aforementioned measures pertaining to contract size were likely to yield the greatest effect for SMEs in terms of access to public sector contracts. The other 16 index measures were assumed to be equivalent in their impacts. Thus, expert opinion corroborated the empirical evidence regarding size as the pre-eminent barrier to SME participation in public procurement. Having established a defensible rationale for the differential weighting of policy measures, it was then necessary to quantify their relative importance. Heeding the advice of the same experts, and adhering to a conservative approach, a double weighting was assigned to each of the three contract size measures. This meant that the magnitude of their effect was adjudged to be twice that of the other 16 measures. The end-outcome is a policy compliance index scaled 0 to 22 i.e. 16 measures x 0 or 1 + 3 measures x 0 or 2. This concludes the discussion on how compliance with SME-friendly procurement policy was operationalised, measured and computed. Section 3.14 explains how the predictors of policy compliance were operationalised and measured.

3.14 Predictors of policy compliance

The institutional factors used to predict compliance with SME-friendly procurement policy are set out here. First put forward by Oliver (1991), these factors constitute a predictive framework for institutional compliance. There are eight factors in all, which relate to the rationale for compliance (social legitimacy and economic gain);

institutional context (consistency of institutional rules and organisational dependence on rule setters); the content of the institutional pressures (compatibility of institutional pressures with organisational goals and the effects of institutional pressures on professional discretion); and the control mechanisms behind institutional pressures (coercive and mimetic). Each of the eight institutional predictors was operationalised by a single-item measure developed for the purposes of this study (see Table 13). Social legitimacy, for instance, was operationalised by putting the following proposition to respondents: ‘facilitating SME participation in contract competitions is important to my reputation as a public buyer’. Economic gain was operationalised by getting respondents to state their level of agreement with the following statement: ‘SME participation in contract competitions results in more competitive bid prices for my department or organisation’. A panel of academic experts and procurement practitioners was used to validate the operationalisation of the predictor variables (see section 3.8.3). All variables were measured on a 1-5 Likert scale except for organisational dependence, which was treated as a dichotomous variable. The ‘greater dependency’ group consisted of central and local government authorities. The ‘lesser dependency’ group was made up of all other public sector organisation types.

3.14.1 Single-item measurement

Single-item measures of institutional pressures were deemed to be most appropriate and feasible for this study. Given that the eight predictive factors had to be newly operationalised, the use of single-item measures limited the potential for error. Any attempt to capture the eight factors using multiple-item measures would have proved more challenging from the perspective of upholding construct validity. Single-item measures also minimised the burden on respondents, which is conducive to

maximising response rates (Czaja and Blair, 1996). Had multiple-item measures been used for each of the eight institutional predictors the respondent burden would have been significantly greater. It may even have dissuaded respondents from participating in the research. Gelderman, Ghijsen and Schoonen (2010) were of this same opinion when they decided to use a mix of multi and single-item constructs in their study of procurement compliance. Where purchasing-related studies have used multi-item measures to capture institutional pressures, the number of predictive factors has been limited to just three (Hoejmoose, Grosvold and Millington, 2014; Sancha, Longoni and Gimenez, 2015; Zhu, Sarkis and Lai, 2013). One final point is that the use of single-item measures lessened the threat that respondents answered questions in a repetitive and patterned way, which is always a risk when a high number of scaled questions are clustered together.

Table 13 Institutional constructs and their operationalisation

No.	Factor	Operationalisation	Measurement scale
1	Social legitimacy	<i>Facilitating SME participation in contract competitions is important to my reputation as a public buyer</i>	Strongly disagree (1)-strongly agree (5)
2	Economic gain	<i>SME participation in contract competitions results in more competitive bid prices for my dept./organisation</i>	Strongly disagree (1)-strongly agree (5)
3	Institutional rule consistency	<i>Facilitating SME participation in contract competitions is compatible with optimising value for money and complying with EU law</i>	Strongly disagree (1)-strongly agree (5)
4	Dependence on institutional rule setter	<i>Type of public sector organisation: Central government; local government; state agency; semi-state/utility; education institution; all other types</i>	Dichotomous variable <u>Greater dependency:</u> central government and local government <u>Lesser dependency:</u> state agency; semi-state/utility; education institution; all other types
5	Compatibility of	<i>A procurement goal of my</i>	Strongly disagree (1)-

	institutional pressure with organisational goals	<i>dept./organisation is to facilitate the broadest participation of suppliers in contract competitions</i>	strongly agree (5)
6	Constraints on professional discretion	<i>SME-friendly policy limits my discretion as a buyer</i>	Strongly disagree (1)-strongly agree (5)
7	Coercion	<i>There are consequences for me from not following SME-friendly policy</i>	Strongly disagree (1)-strongly agree (5)
8	Diffusion of practices	<i>The majority of buyers I know take steps to facilitate SME participation in contract competitions</i>	Strongly disagree (1)-strongly agree (5)

3.15 Control variables

In addition to the institutional factors set out in section 3.14, seven variables relating to the characteristics of public buyers and their organisations were included as controls in the predictive model. Table 14 (pg. 201) lists these variables and explains how they were operationalised and measured. They are: procurement experience; procurement involvement; procurement qualification; policy familiarity; organisation size; procurement structure; and procurement maturity. The first four relate to characteristics of the individual public buyer. The remaining three are to do with the organisational environment in which these individuals operate. With the exception of procurement maturity, each of the seven variables has previously been cited in the literature or empirically tested in respect of explaining procurement compliance. Procurement maturity was recommended for inclusion in the model by the review panel during the pre-testing of the survey instrument. It has not been previously controlled for in any model of procurement compliance. More detail on each of the seven control variables, including what foregoing scholarship has already conjectured or empirically observed of their effects on compliance behaviour, is given in sections 3.15.1-3.15.7.

3.15.1 Procurement experience

Procurement experience is the first control variable. One view is that procurement experience is conducive to getting policy implemented. On-the-job experience leads to the accretion of purchasing skills and expertise in supply management. These are among the attributes that instil confidence in public buyers when transacting with suppliers, especially smaller, newer ones. With experience also comes greater awareness of the policy environment and an ability to manage policy expectations. Empirical evidence in support of such relationships exists. In an examination of compliance with rules governing the award of service contracts in the US Hawkins and Muir (2014) found that the experience of public buyers was a decisive factor. An opposing view is that procurement experience impedes the realisation of policy. Learned practices and routines derived from many years spent working in procurement are not easily changed; nor are experienced public buyers necessarily willing to embrace change (Karjalainen and von Raaij, 2011). As such, there is the possibility that experienced public buyers will be more resistant to change initiatives involving SME-friendly procurement in comparison with their relatively less experienced counterparts.

3.15.2 Procurement involvement

Public sector employees with responsibility for procuring goods and services are a heterogeneous group (Flynn et al., 2013). For some of them procurement forms a minor part of their habitual work activity. Their primary role will be something else, whether administrative, managerial or profession-specific in nature. For others, procurement constitutes their entire work role and they are employed exclusively to manage the supply chain needs of their organisation. There is reason to suppose that the extent to which procurement constitutes an employee's work role – procurement involvement - influences compliance behaviour. Preuss (2011) implied that

‘devolved buyers’ i.e. those for whom procurement is only an ancillary part of their role were less dependable for implementing policy than full-time public buyers. Following on from this, Flynn and Davis (forthcoming) empirically demonstrated that procurement involvement drove SME-friendly policy compliance. Explaining this observed effect, the same authors posited that public sector employees for whom procurement constituted all or a major part of their work role had more time, resources, ability and career interest to conform to policy initiatives. Career interest and motivation have also been cited by other scholars as reasons to explain why public buyers give effect to policy recommendations (Georghiou et al., 2014; Murray, 2011).

3.15.3 Procurement qualification

Several studies assert that professional qualifications and/or professional accreditation engender compliance with public procurement rules and policies (De Boer and Telgen, 1998; European Commission, 2008c; Tukamuhabwa, 2012). Evidence has recently been forthcoming to support this contention, finding that trained public buyers exhibit higher levels of procurement rule compliance (Karjalainen and von Raaij, 2011; Mwakibinga and Buvik, 2013; Sang and Mugambi, 2014). Professional training and certification can educate public buyers about the wider policy environment and equip them with the skills and acumen needed to reconcile the various institutional demands made of them by elected representatives (Coggburn and Rahm, 2005). The fact that public procurement is becoming more complex as a result of technological changes and its panoply of policies and regulations places a premium on professionalism (McCue and Gianakis, 2001). A lack of procurement professionalism can undermine compliance. Morgan (2008) highlighted under-developed skill-sets among public buyers as one reason for

sustainable procurement policy not translating into practice. The same factor was mentioned by Glover (2008) in explaining public buyers' risk aversion and a reluctance to transact with smaller and new suppliers. Unqualified buyers are also considered to be more likely to avoid or defy organisational procedures and engage in 'maverick buying' (Karjalainen, Kemppainen and von Raaij, 2009).

3.15.4 Policy familiarity

Internationally, policy familiarity has emerged as a necessary condition for policy compliance in public procurement contexts. The reasoning behind this relationship is straightforward. In order to be able to act on policy individuals must first be aware of its existence, familiar with its content and appreciative of the expectations it places on them. Sang and Mugambi (2014) found this to be the case among Kenyan public buyers where regulatory awareness had a positive influence on compliance with procurement law. Policy awareness was also the single most important factor explaining buyers' adoption of sustainable purchasing practices in Malaysia in a study by McMurray et al., (2014). In another study by Flynn and Davis (forthcoming), public buyers' familiarity with the content of SME-friendly policy in Ireland predicted their level of compliance with it. Similarly, familiarity with EU Procurement Directives among public buyers in the Netherlands was found to be significantly related to regulatory compliance by Gelderman, Ghijsen and Brugman (2006). To be expected, lack of familiarity with procurement policies and regulations reduces the prospect of public buyers conforming to them. Questioned about putting environmentally-sustainable procurement policies into practice, public buyers in the US claimed lack of policy awareness prevented them from doing so (National Institute of Government Purchasing, 2013).

3.15.5 Organisation size

Firm size, measured by number of employees, was one of three organisation-related control variables included in the predictive model. Large firms are better equipped to respond to, and comply with, the demands made of them in their institutional environments (Teo, Wei and Benbasat, 2003). This is because they have more personnel, greater breadth of expertise, administrative slack, organisational capacity, financial resources and information technology capabilities. Public buyers within large organisations should be able to draw on these tangible and intangible resources when adjusting their purchasing practices to better facilitate SME suppliers. That said, studies to date have yet to empirically demonstrate that organisation size is significant in accounting for policy compliance (Flynn and Davis, forthcoming; Mwakibinga and Buvik, 2013). It could be that large organisation size and the status and power that comes with it has the effect of shielding public buyers from institutional pressures. While public buyers in large organisations are in a better position to comply with institutional demands relative to buyers in smaller organisations, they may experience less compulsion and pressure to do so.

3.15.6 Procurement structure

Procurement structure is relevant when accounting for policy compliance. In their case examination of a local government authority Flynn et al., (2012) showed that the transition to a centrally managed procurement function improved compliance performance. Along with advantage of economies of scale, procurement centralisation is associated with economies of process and economies of information and learning (Karjalainen, 2011; Trautmann, Bals and Hartmann, 2009). By economies of process is meant standard, consistent work practices that are used by individuals throughout the organisation. Having a standardised approach to procurement already in place makes it easier for SME-friendly policy to be

incorporated into organisational practices. Low levels of standardisation and a reliance on *ad hoc* approaches is less conducive to successfully embedding government policy in procurement practices. Economies of information and learning refer to the accumulation of knowledge and expertise by a particular unit or department within an organisation. This same body of knowledge can be diffused among employees in the interests of organisational effectiveness. Without a repository of expertise public buyers are likely to find it more difficult to navigate the regulatory and policy environment. The above contentions suggest that procurement centralisation is more conducive to the realisation of policy than decentralised structural arrangements.

3.15.7 Procurement maturity

Procurement maturity is the last of the seven control variables in the model. The assumption is that procurement maturity is correlated with policy compliance. Procurement maturity is understood by reference to four stages: passive, independent, supportive and integrative (Reck and Long, 1988). In the passive stage procurement is no more than a clerical function. In the independent stage procurement uses best-in-class techniques but operates in isolation of other organisational functions. The supportive stage sees procurement contributing to the competitive position of the organisation, although it falls short of underpinning organisational strategy. At the integrative stage procurement has reached full maturity and is recognised as critical to the successful realisation of business strategy. Where the procurement function is rudimentary and has low organisational status the ability and willingness of procurement personnel to act on SME-friendly policy will be limited. Chiefly, they will lack the requisite skills, motivation and organisational support to do so. Conversely, procurement personnel will be more

able and willing to respond positively to SME-friendly policy where the procurement function is more advanced and mature. Professionalism is likely to be higher, organisational support better and there will greater appreciation of how procurement compliance can bolster the legitimacy and effectiveness of the organisation in the eyes of internal and external stakeholders.

Table 14 Operationalisation and measurement of control variables

Variable	Operationalisation	Measurement
Procurement experience	<i>How many years of experience do you have working in procurement?</i>	Number of years
Procurement involvement	<i>In a typical week how much of your work time is spent on procurement-related activity?</i>	0 per cent 1-25 per cent 26-50 per cent 51-75 per cent 76-100 per cent
Procurement qualification	<i>Do you hold a procurement-related qualification?</i>	Yes No
Policy awareness	<i>Are you familiar with the content of Circular 10/14: Initiatives to Assist SMEs in Public Procurement?</i>	Yes No
Organisation size	<i>How many employees are in your organisation?</i>	1-9 employees 10-49 employees 50-249 employees 250+ employees
Procurement structure	<i>How is procurement managed in your organisation?</i>	On a centralised basis On a decentralised basis
Procurement maturity (Reck and Long, 1988)	<i>Which option best describes the role of purchasing in your organisation?</i>	Stage 1: Purchasing is reactive and uses 'quick fixes' to solve problems Stage 2: Our purchasing techniques and practices are the best available Stage 3: Purchasing techniques and practices strengthen our competitive position Stage 4: Purchasing informs and helps to implement our strategy

3.16 Preliminary analysis of survey data

Attention now turns to the screening and preliminary analysis of the data gathered during the primary research phase of the study. A total of 517 responses were received over the two-week survey period. As 3000 public buyers received the questionnaire, this yielded a response rate of 17.2 per cent. A comparison with recent surveys of procurement personnel shows this figure to be acceptable and in line with current trends. In some of these the response rate is lower than that secured here. Costa, Arantes and Tavares (2014) managed responses rates of 6.9 per cent and 15 per cent for two consecutive surveys carried out in 2009 and 2010 among Portuguese public contracting authorities. Large and Thomsen (2011) achieved a 15 per cent response rate from a sample frame of 725 German purchasing managers. Brewer, Wallin and Ashenbaum (2014) achieved 16.3 per cent in their e-survey of 1700 members of the Institute of Supply Management in the US. Marginally higher responses rates from public and private buyers have also been reported: 18.7 per cent by Eltantawy and Guinipero (2013); 20.5 per cent by Large (2005); 22.5 per cent by Meehan and Bryde (2014); 23 per cent by McMurray et al., (2014); and 24.3 per cent by Karjalainen and Von Raaij (2011). Questions around data screening and respondent profile are examined next.

3.16.1 Data screening

After calculating the response rate the dataset was screened for incomplete responses and anomalies. This was done in parallel to independent sample t-testing for respondent representativeness (see section 3.17). As part of screening process, frequency and descriptive tests were performed on the variables. Nothing emerged to give concern in relation to outliers or unusual response patterns. What the screening phase did reveal was that a sizeable proportion of respondents had prematurely quit the survey. High levels of ‘break-off’ are a common occurrence in e-surveying,

unfortunately (Lynn, 2008). Of the 517 questionnaires started, 168 did not contain sufficient data to allow for any further meaningful analysis. The elimination of 168 substantially incomplete responses from the initial return of 517 left 349 usable responses. In terms of absolute numbers, 349 were more than adequate for conducting predictive tests. A widely accepted minimum response threshold for inferential testing is the sum total of predictive variables \times eight + 50 (Tabachnick and Fidell, 2013). Fifteen predictor variables were used in the model, meaning that 170 usable responses would have sufficed²⁹. It was also at this stage that compliance scores were calculated for each public buyer (refer back to section 3.13). The final screening step involved coding and labelling all variables.

3.16.2 Respondent profile

A profile of the 349 respondents who returned usable questionnaires is contained in Table 15 (pg. 205). The extent of their involvement in purchasing varies considerably. Over half of respondents spend less than 25 per cent of their typical working week on purchasing-related activity and just over one in five spend between 76-100 per cent of their time purchasing. What this tells us is that only a minority of respondents are majorly or exclusively involved in procurement. Consistent with the above, only 34 per cent hold a purchasing-related qualification. Average procurement experience is 9.5 years. Most respondents (72 per cent) are familiar with the content of SME-friendly procurement policy. Educational attainment is high among respondents. Over 90 per cent have a third level qualification, with 41 per cent qualified to postgraduate level. Respondents come from across the public sector spectrum. The highest percentage (25 per cent) is from the education sector. Approximately 44 per cent of respondents work in large organisations. Procurement

²⁹ $15 \times 8 = 120 + 50 = 170$.

is centralised in 54 per cent of cases. The four stages of procurement maturity are all present. Thirty per cent of respondents identify procurement in their organisation as being at stage two and a further 30 per cent identify it as having reached stage four, or full maturity. Taken together these descriptors provide a good snapshot of who are the survey respondents and how procurement is managed in their organisations.

Table15 Respondent profile

Individual characteristics	%
<i>Procurement involvement</i>	
Less than 25 per cent	58.2
26-50 per cent	10
51-75 per cent	9.2
76-100 per cent	22.6
<i>Procurement experience</i>	
Mean	9.49 years
Std. Dev.	8.02
Median	7 years
<i>Procurement qualification</i>	
Yes	34.1
No	65.9
<i>Policy familiarity</i>	
Yes	72
No	28
<i>Educational attainment</i>	
Leaving Certificate	5.4
Third level certificate	7.4
Third level diploma	11.5
Bachelor degree	32.4
Master's degree	41
PhD	2.3
Organisation characteristics	%
<i>Organisation type</i>	
Central government	16.3
Local government	10.6
State agency	16.9

Semi-state/utility	10.7
Education institution	24.9
Other (incl. external consultants)	20.6
<i>Organisation size</i>	
1-9 employees	11.2
10-49 employees	19.8
50-249 employees	24.4
250 or more employees	44.6
<i>Procurement structure</i>	
Centralised	54.7
Decentralised	45.3
<i>Procurement maturity</i>	
Stage 1	23.8
Stage 2	30.1
Stage 3	16.3
Stage 4	29.8

n = 349

3.17 Respondent representativeness

Securing an adequate response rate is paramount in survey-based research (see section 3.7). The higher the response rate the more likely it is that survey estimates will be representative of the population (Dillman, 2007). The reality for most researchers is that only a minority of individuals selected to participate in a study will respond. In the domain of purchasing and supply chain management Melynk et al., (2012) calculated that the average response rate for survey-based studies published between 1990 and 2008 was 33 per cent. If non-response was completely random this would not be a problem (Hok, De Leeuw and Dillman, 2008; Moser and Kalton, 1985). Random non-response cannot be assumed as respondents can and do differ in statistically significant ways from non-respondents (Blair & Zinkhan, 2006; Lynn, 2008). When this happens the respondent cohort is not representative of the population from which it is drawn. Any attempt to generalise from the sample to the population is compromised as a result (Whitehead, Groothuis and Blomquist, 1993). For these reasons it is always advisable to test for non-response bias. Non-response bias tests are overviewed in section 3.17.1. Section 3.17.2 then explains the decision to choose the extrapolation test. The results from it are given in section 3.17.3. These indicate that the public buyer respondents are representative of the population from which they are drawn.

3.17.1 Non-response bias tests

Several methods are available to detect non-response bias. Among the most reliable of these is comparing survey data with known values for a population (Armstrong and Overton, 1977). In business surveys a standard scenario would involve comparing respondent characteristics against the already established characteristics of the population. Population data is not always available for more specific population groups. In such circumstances the extrapolation method pioneered by

Pace (1939) is the next best alternative. Extrapolation assumes that late respondents are proxies for non-respondents when testing for bias. It does so in the belief that the factors that explain non-response – no interest in the research topic, wariness over the intent of the survey, time availability – also explain delayed response. From this premise, late respondents and non-respondents are taken to be equivalent and therefore substitutable when testing for non-response bias. The extrapolation technique involves comparing the means of early and late respondents on pre-selected characteristics. The absence of statistically significant differences between the two groups indicates that respondents are representative of their population, although it does not guarantee of it (Dalecki, Whitehead and Blomquist, 1993). The presence of statistically significant differences between early and late respondents points to a skewed respondent sample that is significantly different from the population.

3.17.2 Non-response bias tests: extrapolation

The extrapolation technique was used to test for non-response bias in this study. The decision to use extrapolation was determined by the lack of any viable alternative. No reliable external data on the public buyer population in Ireland existed at the time of the survey and so there was no benchmark against which to compare the characteristics of the respondent sample. Presented in a more positive light, extrapolation is commonly used in purchasing and supply chain management research (Brewer, Wallin and Ashenbaum, 2014; Gelderman, Ghijsen & Brugman, 2006; Large, 2005; Meehan and Bryde, 2014; Miocevic, 2011; Sancha, Longoni and Gimenez, 2015). It is efficient from a resource perspective relative to other strategies for non-response testing, such as follow-up phone contacts with identified non-respondents (Lynn, 2008). Comparing early and late respondents groups also made

sense for this study as there was a clear time demarcation between the former and the latter. The early respondent group submitted their questionnaire within 24 hours of initial contact being made. Ten days had elapsed before the individuals within the late respondent group submitted their questionnaire, and then only after receiving a reminder email notification.

3.17.3 Representativeness test results

The independent sample t-test is used to compare variables common to two separate groups (Brace, Kemp and Snelgar, 2009). Running the t-test in this study revealed there to be no significant difference between early and late respondents. Based on the principles of extrapolation this allows us to generalise our survey estimates to the Irish public buyer population. Details of the test are as follows. The early respondent group comprised the first 100 public buyers who submitted their questionnaires. The late respondent group was made up of the final 100 public buyers to submit their questionnaire. The two groups were compared across their individual characteristics and the answers they supplied on institutional pressures (see Table 16). The characteristics tested were procurement experience, procurement involvement, educational attainment and organisation size. Early respondents had marginally higher scores on procurement experience, procurement involvement and educational attainment compared to late respondents. Their organisations were also somewhat larger. These differences were not statistically significant ($p > .05$). Early and late respondents were also similar across institutional factors. On six out of the seven factors no statistically significant difference was observed ($p > .05$). Only on the question of the compatibility of SME-friendly policy with organisational goals did the early and late respondent groups differ ($p < .10$).

Table 16 Early versus late respondents*

	Mean scores: Early respondents	Mean scores: Late respondents	Mean difference	Sig. (2- tailed)
<i>Characteristics</i>				
Procurement experience (years)	10.19	8.98	1.20	.297
Procurement involvement (1-5 interval scale)	2.95	2.71	.24	.189
Educational attainment (1-6 interval scale)	4.08	4.02	.06	.719
Organisation size (1-4 interval scale)	3.05	2.94	.11	.464
<i>Institutional factors</i> (1-5 Likert scale)				
Social legitimacy	3.87	3.85	.02	.872
Economic gain	3.76	3.54	.22	.104
Consistency of rules	3.87	3.76	.11	.399
Compatibility	4.06	3.83	.23	.065
Constraints	2.61	2.51	.10	.442
Coercion	3.36	3.15	.21	.169
Diffusion of practices	3.30	3.30	.00	1.00

*Equal variances assumed in all cases

3.18 Conclusion

The verification of respondent representativeness brings this chapter to a close. The next chapter reports on the results of the descriptive and predictive statistical tests that were carried out on the data. Before moving on it is worth reminding ourselves of the main strands of the methodology. The initial sections clarified the philosophical assumptions underpinning the study and what these meant in concrete terms for researching SME-friendly policy compliance. While philosophical questions have proved hugely divisive in social science, researchers are advised to at least demonstrate some awareness of the ontological, epistemological and methodological import of their decision making (Seale, 1999a, 1999b). Thereafter, the chapter provided a step-by-step account of how the primary research phase was

managed. It began by justifying the choice of the survey-based method, before moving on to discuss issues around the design of self-administered questionnaires, effective survey measurement, identifying and accessing the population of interest, and survey distribution. Several sections were also devoted to the measurement and operationalisation of the dependent and independent variables in the study, namely: policy compliance, institutional factors and the control variables. Throughout the chapter rationales were offered in defence of choices made and actions taken. The weaknesses and limitations of the research strategy were also acknowledged where they were believed to exist. Paving the way for the main statistical tests in chapter four, a preliminary analysis of the dataset was undertaken in the latter sections of this chapter.

Chapter 4:

Research findings

4.0 Overview of chapter four

This chapter reports on the data findings, the preliminary screening aspects of which were covered in chapter three. Section 4.1 examines the extent of policy compliance. It provides key descriptive statistics surrounding public buyers' compliance with SME-friendly procurement policy. An assessment of compliance with each of the 19 individual measures that comprise the SME-friendly procurement index is also performed. Together these descriptive findings answer Research Question 1: to what extent are public buyers complying with SME-friendly procurement policy? Section 4.2 focuses on the institutional predictors of policy compliance. It presents the results of a three-step hierarchical regression and identifies the predictor variables significant at each of the three stages. The institutionally-derived model is shown to be significant ($p < .01$), accounting for 27.3 per cent of the variance in policy compliance (Adjusted $R^2 = .273$). Section 4.3 interprets the findings of the predictive model in light of the hypotheses set forth. Seven of the eleven hypothesised relationships between institutional pressures and policy compliance are supported. This yields the answer to Research Question 2: how does the institutional environment affect public buyers' compliance with SME-friendly procurement policy? The chapter finishes in section 4.4 with a summary of the main findings.

4.1 Extent of SME-friendly policy compliance

Evidence on what is happening with SME-friendly procurement policy in practice is scant and, with a few exceptions (Flynn and Davis, forthcoming; GHK and Technopolis, 2007; GHK, 2010), most of what we know has emerged from case study insights that are not representative of the behaviour of national populations of public buyers (Cabras, 2011; Erridge and Hennigan, 2012; Loader, 2007, 2011; Preuss, 2009; Walker and Preuss, 2008). It is against this backdrop that determining the extent to which SME-friendly policy is being complied with is warranted. The

remainder of this section describes what the Irish population of public buyers is doing in the face of institutional policy pressures to make public procurement more inclusive of SMEs. Section 4.1.1 gives the key statistical descriptors for policy compliance. These indicate that SME-friendly policy is being complied with to a moderate extent. A breakdown of compliance for each of the 19 recommendations that comprise the SME-friendly procurement index is provided in section 4.1.2. Substantial variation in compliance is evident across the suite of SME-friendly ‘positive measures’. Some measures are being put into practice by the majority of public buyers. Others are being acted on by only a minority. The final section 4.1.3 draws the descriptive findings together in order to answer Research Question 1.

4.1.1 Policy compliance scores

Analysis of the policy compliance scores for public buyers reveals the following. The minimum compliance score is 5 (out of 22) and the maximum is 22 (out of 22), which gives a range of 17. The mean or average score is 14.54 (std. dev. 3.67). The 95 per cent Confidence Interval for the estimated population mean is between 14.15 and 14.93. The average Irish public buyer is complying with at least half of all the ‘positive measures’ geared towards facilitating increased SME participation in public contract competitions. The median score is 15, which slightly exceeds the mean score. The most frequent score for public buyers (mode score) is also 15. The full list of statistical descriptors and their associated values is given in Table 17. To shed further light on public buyers’ compliance behaviour the distribution of index scores is depicted in Fig. 11 (pg. 217). As can be seen, there is a clustering of scores on the right-hand side of the compliance scale; confirmed by the negative standardised z-score for skewness of -1.47. Apart from this, compliance with SME-friendly procurement policy appears to be quite normal in its distribution. A minority of

public buyers with low scores and high scores bookend the majority of the population found in the middle of the compliance scale.

Table 17 Statistical descriptors for policy compliance

Measure	Statistic	Standard error
Mean	14.54	.19
95 per cent Confidence Interval for Mean		
Lower Bound	14.15	
Upper Bound	14.93	
Standard deviation	3.67	
Median	15	
Mode	15	
Variance	13.5	
Minimum	5	
Maximum	22	
Range	17	
Skewness	-.193	.131
Skewness (standardised z-score)	-1.47	

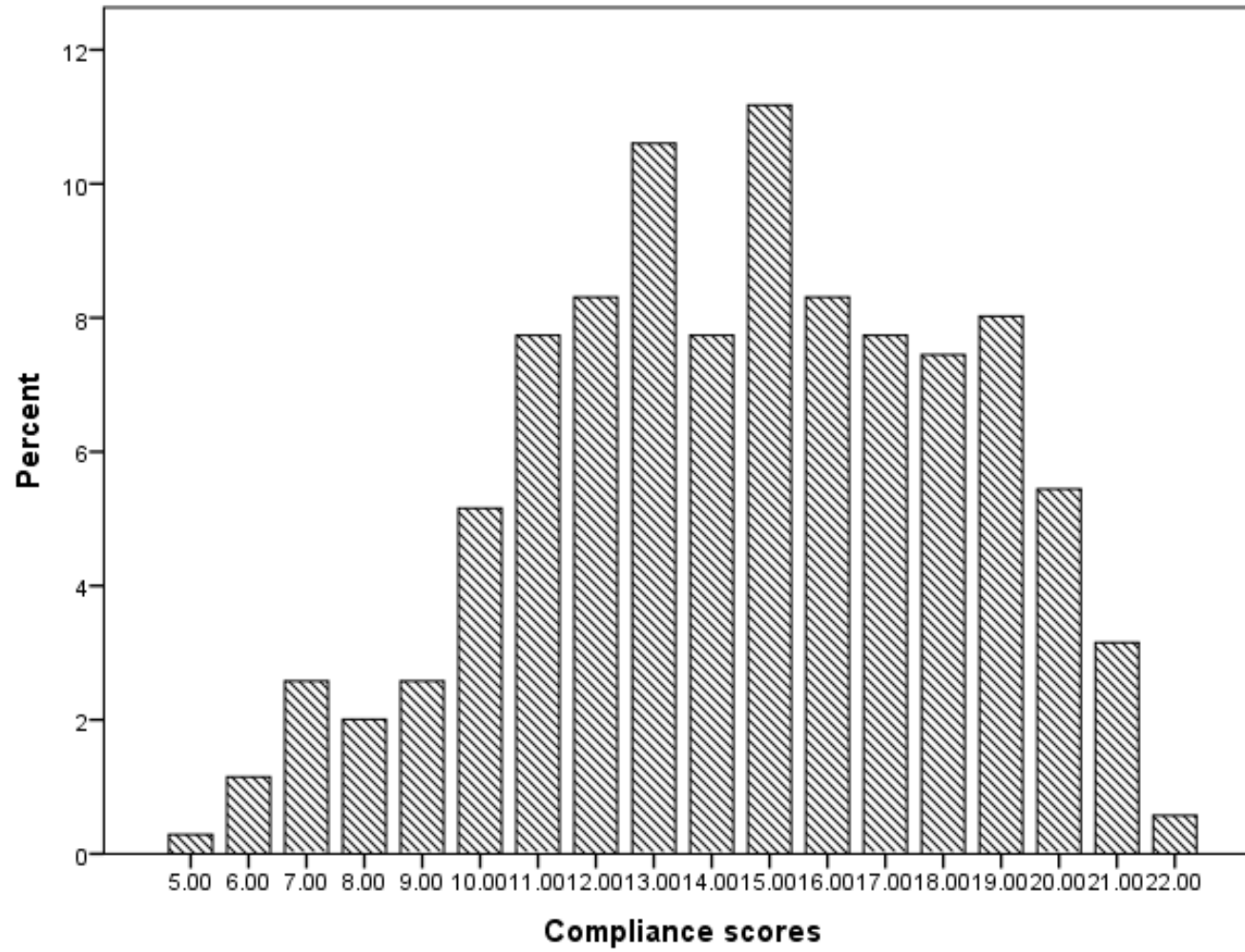
A quartile split was performed on the dependent variable to further disaggregate SME-friendly policy compliance. The bottom quartile of compliance scores goes from 5 up to 11. The second compliance quartile is in the range of 12 to 14 inclusive. The third quartile goes from 15 to 17 inclusive. The upper quartile contains scores of 18 up to a maximum of 22. These four quartiles can be mapped on to the following compliance ranges: low compliance; low-medium compliance; medium-high compliance; and high compliance (see Table 18). All respondents are found to be complying with at least some of ‘positive measures’ recommended in official government policy. No single respondent is exhibiting outright defiance of SME-friendly procurement policy. The bottom quartile extends as far as 11, which is the mid-way point on the scale. The second and third quartiles are more compressed and approximate to the compliance ranges of low-medium and medium-high respectively. At the upper end, less than one per cent of respondents are recorded as exhibiting perfect compliance i.e. scoring 22 out of 22. Still, one in four public

buyers claims to be doing almost all that is asked of them for facilitating SMEs in contract competitions, evidenced by their scores of 18 or higher.

Table 18 Policy compliance ranges

Quartile	Compliance score	Compliance range
Lower	5-11	Low
2nd	12-14	Low-medium
3rd	15-17	Medium-high
Upper	18-22	High

Fig. 11 Distribution of policy compliance scores (n =



349)

4.1.2 Compliance with individual policy recommendations

At the aggregate level public buyers' compliance with SME-friendly procurement policy has been established. We now move to look at compliance with the individual 'positive measures' that comprise the index. Marked variation is evident among the 19 measures (see Table 19, pg. 221). Compliance spans from a low of 40 per cent to a high of 88 per cent. At the high end of reported compliance are measures to do with proportionate insurance requirements (88 per cent), online advertising of contracts valued at €25,000 or more (87 per cent), providing feedback to unsuccessful tenderers (83 per cent), open tendering (78 per cent) and allowing suppliers to self-declare their financial capacity (78 per cent) and insurance cover (76 per cent). More moderate levels of compliance are found on other measures, including: devising inclusive framework agreements (63 per cent), dividing contracts into lots (61 per cent) and using standardised tender documents and templates (61 per cent). Lower levels of compliance are observable on several other measures, where only a minority of public buyers are acting as policy recommends. In this category are measures to do with accepting variants to specifications (40 per cent), publishing PINs (42 per cent), being flexible in accepting proof of financial capacity from tenderers (44 per cent) and conducting market analysis prior to issuing formal requests for tender (49 per cent).

The assessment of compliance with individual measures reveals the inconsistent way in which public buyers are acting on SME-friendly policy. There is clear evidence of progress being made in some areas. In other areas progress is less obvious. We can illustrate this by way of some examples. Over seven in ten public buyers claim to be adhering to the two measures aimed at widening access to contract competitions. This bodes well in terms of smaller suppliers and firms new to public procurement

having at least the opportunity to participate. The same is true of reducing SMEs' information deficit when tendering. Approximately eight out of ten public buyers stated that they are taking the appropriate steps in this regard by providing feedback and publishing contract award notices. Inroads are also being made in alleviating the administrative burden on small suppliers, particularly by the majority of public buyers deferring to the principle of self-declaration for financial capacity and insurance cover. The results for making contracts more visible to SMEs are mixed. While almost nine out of ten public buyers are advertising their contracts on *eTenders*, only four out of ten are publishing PINs. The latter are beneficial in alerting SMEs to the future demand requirements of their potential clients.

Progress is less evident on the other three remaining dimensions of SME-friendly tendering: contract size; ensuring proportionate qualification criteria; and openness to new suppliers and supply solutions. The first of these three is notable for the fact that it is the single greatest impediment to SMEs' participation in public procurement. Many of the barriers experienced by SMEs when tendering, such as public buyers' reticence in engaging with atypical suppliers and demands to satisfy onerous financial turnover thresholds are the by-product of large contract size. In spite of their centrality to reform of public procurement, only between 50-63 per cent of public buyers are dividing contracts into lots, devising inclusive framework agreements or encouraging consortium bids. Adherence to measures around proportionality in the use of qualification and assessment criteria is also patchy. While almost nine out of ten are stipulating insurance cover requirements that are proportionate are to the circumstances of the contract, less than half show flexibility when it comes to accepting proof of suppliers' financial credentials. Cultivating a procurement system in which public buyers proactively search for the best suppliers

and supply solutions also has some way to go. Seventy per cent take life-cycle costs into account, but only 49 per cent are researching their marketplaces and even fewer are willing to accept reasonable variants to tender specifications.

Table 19 Compliance with individual policy recommendations

	Measures 1-19	Compliant %	Non-compliant %
Making contract opportunities visible	<i>Online advertising:</i> advertise contracts for supplies and general services valued at €25,000 or more on <i>eTenders</i>	87	13
	<i>Prior Information Notices (PINs):</i> communicate long-term purchasing plans by publishing PINs on <i>eTenders</i>	42	58
Widening access to opportunities	<i>Open tendering procedure:</i> use open (competitive) tendering for contracts worth up to €134,000 for goods and services contracts	78	22
	<i>Qualification criteria:</i> use broadly defined qualification criteria in order to increase the number of eligible tenderers	72	28
Alleviating administrative burden	<i>Self-declare financial capacity:</i> allow applicants to self-declare their financial capacity; seek evidence of same in the event of the tenderer being short-listed	78	22
	<i>Self-declare insurance cover:</i> allow applicants to self-declare their insurance cover; seek evidence of same in the event of the tenderer being short-listed	76	24
	<i>Standard tender documents:</i> use standard documentation and tender templates issued by the OGP	61	39
	<i>Online tender submission:</i> promote online submission of tenders by suppliers as the norm	63	37
Contract size	<i>Divide contracts into lots:</i> divide contracts into lots where appropriate and practical	61	39
	<i>Openness to SME consortium bidding:</i> be open to consortium bids by, for example, drawing attention to this possibility in the contract notice and/or by publishing PINs	50	50
	<i>Inclusive framework agreements:</i> ensure, where possible, that the terms of framework agreements facilitate the inclusion of small firms	63	37

Proportionality	<i>Proportionate turnover requirements:</i> do not set company turnover requirements at more than twice the estimated contract value for routine goods and services	59	41
	<i>Proportionate insurance requirements:</i> request types and levels of insurance that are proportionate and reasonable in the context of the contract (types and limits specified in policy guidance)	88	12
	<i>Flexible over proof of financial capacity:</i> be flexible over the type of proof of financial capacity acceptable from tenderers	44	56
Openness to new suppliers/solutions	<i>Market analysis:</i> undertake market analysis prior to tendering	49	51
	<i>Variants to specifications:</i> indicate where reasonable variants to the tender specifications are acceptable	40	60
	<i>Life cycle costs:</i> take account of whole life-cycle costs associated with a purchase	70	30
Information asymmetries	<i>Feedback for tenderers:</i> provide written feedback to all tenderers as a matter of good practice	83	17
	<i>Publication of award notices:</i> publish all contract award notices over €25,000 on <i>eTenders</i>	78	22

4.1.3 Answering Research Question 1

Analysis of the survey data reveals that public buyers are complying with SME-friendly procurement policy to a moderate extent – signified by the mean score of 14.54 out of 22 on the compliance index. Policy recommendations are not being eschewed, but nor are they being fully and comprehensively adhered to and put into practice. The relatively normal distribution of compliance scores shows this to be the case. In many respects the response of public buyers resembles a compromise approach to facilitating SMEs in contract competitions. Individual assessment of compliance rates across the 19 individual policy recommendations that make up the index is informative. Some categories of measures are receiving solid support. Other measures are not. In the former is widening access to opportunities, addressing information asymmetries, alleviating the administrative burden of tendering, and publicly advertising contracts. In the latter is tackling contract size issues, using proportionate assessment criteria, and being open to new suppliers and supply solutions. These findings disclose the uneven and disjointed translation of SME-friendly procurement policy into practice that has taken place to date. Without doubt, there is a gap between policy aspiration and its realisation in practice; between what government claims will happen and what is actually happening at organisation level to accommodate SMEs. These findings are situated within the wider literature on regulatory and policy compliance in public procurement in section 5.1.

4.2 Predictors of SME-friendly policy compliance

If the first section of this chapter described *what* public buyers are doing in relation to SME-friendly procurement policy, this section answers *why* they are doing it. It does so by testing a predictive model for policy compliance (refer back to Fig. 7, pg. 131) using a three-step hierarchical regression technique, and then setting out the results. Before going into the detail on the model's findings, two data tests are

performed in sections 4.2.1 and 4.2.2 respectively. The purpose of the first is to identify the inter-correlations between the variables tested in the model. It shows that several of the predictor variables are correlated with each other and with the dependent variable of policy compliance. The second test is to check for multi-collinearity. This is where two or more of the predictor variables are so highly correlated as to make it difficult to distinguish their individual effect on policy compliance. There is no indication of multi-collinearity in the dataset. The remaining sections 4.2.3–4.2.6 are devoted to testing the model. The three-step hierarchical regression technique is outlined initially. The significant predictors of policy compliance at each of the three stages of model testing are then identified. Simultaneously, the predictive power of the model is reported at each of the three stages.

4.2.1 Inter-correlations

Prior to conducting predictive tests it is advisable to examine inter-variable correlations. The inter-variable correlations in this dataset, which include Pearson's Correlation Coefficient values and their significance levels, are contained in Table 20 (pg. 226). A number of statistically significant correlations can be observed. However, all observed correlations are in the low or moderate ranges and the highest value is .57³⁰. This gives an initial indication that multi-collinearity is not a problem in the dataset. Procurement involvement and procurement qualification are correlated with all other control variables. Policy familiarity is also correlated with organisation size and procurement structure. Procurement experience does not appear to be related with any variable save for the aforementioned relationships to procurement involvement and procurement qualification. Five of the seven control variables

³⁰ <.30 = low correlation. Between .30 and .70 = moderate correlation. >.70 = strong correlation.

correlate with the dependent variable of policy compliance ($p < .01$). The two exceptions are procurement experience and procurement structure. Pearson's values for inter-correlations between the controls and policy compliance range from .22 to .36. Correlations are also observed between the control variables and the institutional variables, and between the institutional variables themselves. In reference to the latter, social legitimacy, economic gain, institutional rule consistency and compatibility variables are moderately correlated. Five of the eight institutional variables correlate with policy compliance ($p < .05$). The Pearson's values for these relationships range from .10 to .22.

Table 20 Inter-correlations within the variable set

	Experience	Involvement	Qualification	Policy familiarity	Org. size	Procure. structure	Procure. maturity	Legitimacy	Economic gain	Rule consistency	Dependence	Compatibility	Constraints	Coercion	Diffusion	Compliance
Experience	1															
Involvement	.13**	1														
Qualification	.19**	.57**	1													
Policy familiarity	.07	.41**	.36**	1												
Org. size	.08	.42**	.30**	.41**	1											
Procure. structure	.03	.24**	.13*	.04	-.14**	1										
Procure. maturity	.09	.20**	.11*	.11*	.03	.03	1									
Legitimacy	-.05	.09	.10*	.06	-.06	.00	.10	1								
Economic gain	-.02	.00	-.01	-.10	-.17**	-.05	.04	.50**	1							
Rule consistency	-.03	.00	.01	.04	-.06	-.06	.01	.51**	.52**	1						
Dependency	-.05	.08	.04	.17**	.33**	-.26**	.01	.06	.03	.06	1					
Compatibility	.06	.20**	.14**	.20**	.10**	.07	.15**	.39**	.27**	.35**	.06	1				
Constraints	.08	.13**	.11*	-.01	.00	.15**	-.05	.14**	-.17**	-.16**	-.06	-.07	1			
Coercion	-.06	.12*	.06	.14**	.04	-.10	.11*	.04	.03	.03	.12*	.06	.14**	1		
Diffusion	-.04	.15**	.10	.03	-.01	.11*	.10	.37**	.29**	.33**	.02	.38**	-.07	.05	1	
Compliance	.08	.36**	.33**	.35**	.27**	.10	.22**	.13*	.00	.16**	.18*	.22**	-.08	.10*	.05	1

**Correlation is significant at the .01 level (2-tailed)

*Correlation is significant at the .05 level (2-tailed)

4.2.2 Testing for multi-collinearity

High inter-variable correlations can pose problems when attempting to isolate the relative contribution of predictors in a statistical model – a problem referred to as multi-collinearity. Two diagnostic checks were performed on the dataset to test for multi-collinearity (Brace, Kemp and Snelgar, 2009; Field, 2000). The first of these looked at Tolerance Values. Tolerance Values are taken as an indicator of the correlation between predictor variables and are measured on a 0 to 1 scale. A variable with a Tolerance Value at or near 0 is closely related to other predictor variables. The lowest observed Tolerance Value in the dataset was .48. This provided the first evidence that multi-collinearity was not a problem. The second diagnostic check examined the Variance Inflation Factor (VIF) associated with each predictor variable. VIF is the obverse of Tolerance Value. A high VIF score means that a predictor variable is closely related to one or more other variables. VIF is measured on a 1 to 10 scale. The highest observed VIF score was 2.05. The result of the second test confirmed what initially transpired through the Tolerance Values, namely: that the variables were not correlated with one another to the extent that they in any way compromised the predictive validity of the policy compliance model.

4.2.3 Testing the predictive model of policy compliance

The predictive model of policy compliance was tested using a three-step hierarchical multiple regression technique. The same approach has been used in recent studies on policy compliance and policy uptake in a procurement context (Hoejmoser, Grosvold and Millington, 2013; Mwakibinga and Buvik, 2013; Sancha, Longoni and Gimenez, 2015). In the first step the seven control variables were entered into the model (model 1). The second step saw the inclusion of the eight institutional predictor variables (model 2). In the third and final step the three moderator variables were added (model 3). In total 18 discrete variables were tested as part of the predictive

model of policy compliance³¹. The model was significant ($p < .001$) at each of the three stages (see Table 21). The significance of the final model reads as: $F(18, 316) = 7.98$, $p < .001$. The complete model explained 27.3 per cent of the variance in policy compliance (Adjusted $R^2 = .273$). The variance attributable to the model at each of the three stages is reproduced in Table 22 (pg. 229). It shows that the predictive power of the model increased with the addition of the second and then third set of independent and moderator variables respectively. The Adjusted R^2 figure, which measures variance in the dependent variable, went from .209 in model 1 to .252 in model 2 and finally to .273 in model 3. What this demonstrates is that the institutional predictors and their interaction effects were significant in predicting policy compliance even after the characteristics of public buyers and their organisations were controlled for. More detail on each of the three test steps is provided in sections 4.2.4-4.2.7.

Table 21 ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1016.414	7	145.202	13.627	.000 ^b
	Residual	3484.421	327	10.656		
	Total	4500.836	334			
2	Regression	1285.052	15	85.670	8.498	.000 ^c
	Residual	3215.784	319	10.081		
	Total	4500.836	334			
3	Regression	1407.025	18	78.168	7.984	.000 ^d
	Residual	3093.811	316	9.791		
	Total	4500.836	334			

a Dependent variable: Policy compliance

b Predictors: (Constant) x 7 control variables

c Predictors: (Constant) x 7 control variables & 8 independent variables

d Predictors (Constant) x 7 control variables & 8 independent variables & 3 moderator variables

³¹ For missing data, cases were excluded on a listwise basis. 15 of the 349 usable responses (cases) had one or more missing variables. As such, these were not analysed in the predictive model.

Table 22 Predictive power of the policy compliance model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.475 ^a	.226	.209	3.26431
2	.534 ^b	.286	.252	3.17503
3	.559 ^c	.313	.273	3.12898

Dependent variable: Compliance

a Predictors: (Constant) x 7 control variables

b Predictors: (Constant) x 7 control variables & 8 independent variables

c Predictors (Constant) x 7 control variables & 8 independent variables & 3 moderator variables

4.2.4 Model 1

The first variable block entered into the hierarchical regression consisted of the seven control variables. This first model (model 1) was significant at $F(7, 327) = 13.63$, $p < .001$. The percentage of variance explained was 20.9 per cent (Adjusted $R^2 = .209$). Five of the seven control variables emerged as significant predictors of public buyers' compliance with SME-friendly policy (see Table 23). The five variables were procurement involvement ($p < .10$); procurement qualification ($p < .05$); policy familiarity ($p < .01$); organisation size ($p < .10$); and procurement maturity ($p < .01$). The findings were consistent with *a priori* expectations regarding the likely effect of these five variables on policy compliance. Experience in public purchasing and the structure of the procurement function (centralised or decentralised) were not significant in predicting policy compliance at stage one. Of the five significant predictors, the first three relate to the attributes of public buyers. The latter two relate to organisation characteristics. All five predictors had a positive impact on policy compliance. Judged by the standardised coefficients, the strongest predictive effect belonged to policy familiarity ($\beta = .195$), followed by procurement maturity ($\beta = .159$), procurement involvement ($\beta = .125$), procurement qualification ($\beta = .123$) and organisation size ($\beta = .10$).

Table 23 Co-efficients^a (controls)

Model 1	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta β		
(Constant)	9.529	.737		12.933	.000
Experience	-.003	.023	-.007	-.146	.884
Involvement	.339	.183	.125	1.853	.065
Qualification	.952	.473	.123	2.012	.045
Policy familiarity	1.596	.463	.195	3.444	.001
Org. size	.364	.203	.104	1.790	.074
Procure. structure	.427	.387	.058	1.104	.270
Procure. maturity	.505	.158	.159	3.192	.002

a. Dependent Variable: Policy compliance

4.2.5 Model 2

The second variable block entered into the hierarchical regression consisted of the eight institutional predictor variables. This second model (model 2) was significant at $F(15, 319) = 8.50, p < .001$. The percentage of variance explained by model 2 was 25.2 per cent (Adjusted $R^2 = .252$), which was an increase of 4.3 per cent on model 1. Three of the eight institutional variables were significant in predicting policy compliance (see Table 24). These were consistency of institutional rules in public procurement ($p < .01$); dependence on the institutional rule setter ($p < .05$); and the constraining effect of SME-friendly policy on professional discretion ($p < .05$). The significant effects in model 2 were in the direction hypothesised. Institutional rule consistency ($\beta = .19$) and dependence on the institutional rule setter ($\beta = .135$) had a positive impact on policy compliance. The constraining effect variable had a negative impact on compliance ($\beta = -.10$). The other five institutional predictors were not significant at this stage. Four of the five significant control variables in model 1 remained significant in model 2. These were procurement involvement (p

<.05); procurement qualification ($p <.05$); policy familiarity ($p <.05$); and procurement maturity ($p <.01$). Organisation size, which was significant in model 1, did not retain its significance in model 2 ($p = .26$). The previously non-significant control variable of procurement structure emerged as newly significant ($p <.05$), wherein a centralised configuration was found to be positively associated with public buyers' compliance with SME-friendly policy.

Table 24 Co-efficients^a (controls & independent variables)

Model 2	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta β		
(Constant)	8.695	1.559		5.578	.000
Experience	.004	.022	.009	.183	.855
Involvement	.374	.183	.138	2.050	.041
Qualification	1.052	.463	.136	2.271	.024
Policy familiarity	1.124	.466	.137	2.411	.016
Org. size	.235	.212	.067	1.109	.268
Procure. structure	.823	.397	.112	2.074	.039
Procure. maturity	.464	.156	.146	2.970	.003
Legitimacy	.072	.253	.018	.284	.776
Economic gain	-.354	.240	-.091	-1.478	.140
Rule consistency	.679	.246	.169	2.756	.006
Dependence	1.106	.434	.135	2.552	.011
Compatibility	.303	.234	.073	1.292	.197
Constraints	-.390	.197	-.100	-1.978	.049
Coercion	.086	.166	.026	.515	.607
Diffusion	-.339	.251	-.075	-1.354	.177

a. Dependent Variable: Policy compliance

4.2.6 Model 3

The third and final variable block entered into the hierarchical regression consisted of the moderating or interactive effect variables. This third model (model 3) was significant at $F(18, 316) = 7.98$, $p <.001$. The percentage of variance explained by model 3 was 27.3 per cent (Adjusted $R^2 = .273$), which represented an increase of

2.1 per cent on model 2. The three interactions were found to act as significant predictors of policy compliance. The moderating effect of procurement experience on the relationship between social legitimacy and policy compliance was significant at $p < .10$. The moderating effect of procurement involvement on the relationship between diffusion of SME-friendly practices and policy compliance was also significant at $p < .10$. The moderating effect of organisation size on the relationship between coercion and policy compliance was significant at $p < .05$. The results were as hypothesised. The first two moderator variables had a positive effect on policy compliance ($\beta = .08$, $\beta = .08$). As anticipated the third moderator variable had a negative effect on compliance ($\beta = -.11$). The three institutional variables significant in model 2 remained significant in model 3. These were institutional rule consistency ($p < .01$); dependence on the institutional rule setter ($p < .01$); and the constraining effect of SME-friendly policy on professional discretion ($p < .10$). In addition, a fourth institutional variable – compatibility of SME-friendly policy with organisation procurement practices – emerged as newly significant ($p < .10$). In line with expectations, its effect on policy compliance was positive ($\beta = .10$). The five control variables that were significant in model 2 remained significant in model 3. The output from model 3 is contained in Table 25.

Table 25 Co-efficients^a (controls, independent variables & moderators)

Model 3	Unstandardised Coefficients		Standardised Coefficients	t	Sig.
	B	Std. Error	Beta β		
(Constant)	8.466	1.540		5.499	.000
Experience	.008	.022	.017	.356	.722
Involvement	.362	.181	.134	2.004	.046
Qualification	.999	.457	.129	2.184	.030
Policy familiarity	1.123	.462	.137	2.434	.015
Org. size	.181	.210	.052	.863	.389
Procure. structure	.875	.392	.119	2.232	.026
Procure. maturity	.488	.154	.154	3.164	.002
Legitimacy	-.029	.251	-.007	-.116	.908
Economic gain	-.285	.237	-.073	-1.201	.231
Rule consistency	.680	.243	.169	2.791	.006
Dependence	1.178	.432	.144	2.728	.007
Compatibility	.420	.235	.102	1.786	.075
Constraints	-.346	.197	-.088	-1.759	.080
Coercion	.052	.165	.016	.316	.752
Diffusion	-.357	.250	-.078	-1.429	.154
Interaction1	.279	.165	.081	1.693	.092
Interaction 2	.308	.177	.086	1.743	.082
Interaction 3	-.387	.167	-.111	-2.311	.021

a. Dependent Variable: Policy compliance

Interaction 1 = Procurement experience*Social legitimacy

Interaction 2 = Procurement involvement*Diffusion of SME-friendly practices

Interaction 3 = Org. size*Coercion

4.3 Accepting or rejecting the hypotheses

The results of the predictive tests lead to either acceptance or rejection of the hypothesised relationships between institutional predictors and SME-friendly policy compliance. The final determination on whether to accept or reject a hypothesis is made based on the significance values and regression coefficients in model 3. The proceeding sub-sections 4.3.1-4.3.5 take each hypotheses group in turn and reveal whether there is empirical support for them or not. Hypotheses 1a and 1b relate to the rationales for institutional conformity and policy compliance. There is no support

for either of these. Hypotheses 2a and 2b concern the institutional context and policy compliance. These hypotheses are supported. Hypotheses 3a and 3b focus on the content of institutional pressures and policy compliance. Support is also forthcoming in their case. Hypotheses 4a and 4b are to do with institutional control mechanisms and policy compliance. These hypotheses are rejected. Hypotheses 5a-5c group relate to moderated relationships and policy compliance. Support is found for these three predicted relationships. Section 4.3.6 then draws all the hypotheses results together in order to answer Research Question 2: how does the institutional environment affect compliance with SME-friendly procurement policy. Some commentary on the impact of individual and organisation characteristics on policy compliance is offered in section 4.3.7. A summary of hypotheses outcomes is listed in Table 26 (pg. 240).

4.3.1 Rationale for compliance

The rationale for compliance with SME-friendly procurement policy has two strands to it. The first is social legitimacy. H1a predicted that the social legitimacy public buyers attached to SME-friendly procurement would have a positive impact on policy compliance. No support was found for this relationship ($p = .908$), which means rejection of H1a. Social legitimacy does have a positive impact on policy compliance when the moderating effect of procurement experience is taken into account. This will be returned to in section 4.3.5. The second rationale for compliance is economic gain. H1b predicted that the economic gain to be derived from SME participation in contract competitions would induce policy compliance. No support was returned for this relationship ($p = .231$), leading to the rejection of H1b. Contrary to hypothesised predictions, the two main motivators or rationales for conforming to institutional pressures – social legitimacy and economic gain – do not

appear to be significant in explaining public buyers' compliance with SME-friendly procurement policy. Reasons for why this might be the case are explored in section 5.2.3.

4.3.2 Institutional context

The institutional context of public procurement was expected to affect compliance with SME-friendly policy in two ways. The first was the consistency of the institutional rule set governing public procurement. H2a predicted that perceived consistency between facilitating SMEs, optimising value for money and adhering to EU procurement law would have a positive impact on policy compliance. There was strong support for this predictive effect ($p < .01$), leading to acceptance of H2a. What this tells us is that public buyers who interpret SME-friendly policy to be consistent with the other institutional demands made of them are more likely to comply with it. The second contextual factor related to organisational dependence on the institutional rule setters in public procurement. H2b predicted that organisational dependence would have a positive impact on policy compliance. Strong support was also received for this relationship ($p < .01$). H2b was accepted on this basis. As anticipated, public buyers in central and local government are more likely to comply with SME-friendly procurement policy compared to their counterparts elsewhere in the public sector. This is because of the former's proximity to the apparatus of state administration, their resource dependence on it, and their comparatively lower autonomy and operating discretion.

4.3.3 Content of institutional pressures

Two main effects were also envisaged in respect of the content of SME-friendly procurement policy and eventual compliance with it. The first of these was its relationship to existing procurement practices and goals. H3a predicted that the

compatibility of SME-friendly policy with the pre-existing procurement goals and policies of the buyer's department or organisation would have a positive influence on compliance with it. The result returned was significant ($p < .10$), thus lending support to H3a. Public buyers for whom SME-friendly policy enunciated at state level is congruent with their own organisation's procurement goals and policies appear to be more disposed to it and willing to act on it. The second way in which the content of SME-friendly procurement policy was predicted to affect compliance behaviour was through its implications for professional discretion. H3b predicted that the perceived constraints on professional discretion associated with SME-friendly procurement policy would have a negative effect on compliance. Findings returned were in line with the projected relationship, being both significant ($p < .10$) and negative. H3b is therefore supported. To the extent that SME-friendly policy recommendations are seen to circumscribe discretion and flexibility in purchasing, public buyers are less likely to comply with them.

4.3.4 Control mechanisms

Two types of control mechanisms were deemed relevant to explaining compliance with SME-friendly procurement policy. Coercion was the first of these. H4a predicted that the perceived level of coercion behind SME-friendly procurement policy would positively impact compliance. The finding returned for this relationship was non-significant ($p = .752$). The regression coefficient ($\beta = .01$) confirmed that the effect of coerciveness on policy compliance was negligible. This leads to rejection of H4a. The second control mechanism related to what public buyers believed their peers were doing to facilitate SMEs and how this, in turn, might influence their own procurement behaviour. H4b predicted that perceived diffusion of SME-friendly procurement practices would also have a positive effect on policy

compliance. No support was returned for this relationship ($p = .154$), and so H4b is rejected. The regression coefficient was negligible and even negative ($\beta = -.08$). This was contrary to the assumed role that mimetic forces would play in engendering compliance with institutional standards and norms in public procurement. While neither of the control mechanisms had a direct effect on policy compliance, section 4.3.5 will show that coercion and perceptions on the prevalence of SME-friendly practices did have an indirect effect on policy compliance when moderated by organisation size and procurement involvement respectively.

4.3.5 Moderated relationships

Three moderated or interactive relationships were also put forward for predicting policy compliance. The first of these involved social legitimacy and procurement experience. H5a predicted that procurement experience would positively moderate the relationship between the social legitimacy attached to facilitating SMEs in contract competitions and policy compliance. The findings supported this relationship ($p < .10$), leading to acceptance of H5a. This confirms that the social legitimacy rationale for policy compliance kicks in as public buyers become more experienced and tenured. The second effect concerned the diffusion of SME-friendly practices and procurement involvement. H5b predicted that procurement involvement would positively moderate the relationship between what public buyers believed their peers to be doing to facilitate SMEs and their own compliance behaviour. Support was returned for this moderated relationship ($p < .10$) and so H5b is accepted. The finding indicates that peer behaviour and industry trends drive institutional conformity in cases where individuals spend most or all of their work time on procurement. The third moderated relationship dealt with coercion and organisation size. H5c predicted that organisation size would negatively moderate

the relationship between the coerciveness of SME-friendly policy and compliance with it. In line with expectations, the result was significant and negative ($p < .05$). Organisation size has an attenuating effect on felt coercion for SME-friendly procurement and subsequent compliance with its policies.

4.3.6 Answering Research Question 2

How does the institutional environment affect public buyers' compliance with SME-friendly procurement policy? The answer to this question lies, firstly, in the factors that significantly impact policy compliance. These are the institutional context of public procurement and the content of SME-friendly procurement policy. In respect of the former, the consistency of SME-friendly policy with value for money and EU procurement law has a positive effect on compliance. So does dependence on the institutional rule setter in public procurement – elected government. In respect of policy content, the compatibility of SME-friendly policy with organisation procurement goals is conducive to compliant behaviour. As expected, the constraint which SME-friendly policy imposes on public buyers' discretion produces the opposite effect. The other part of the answer to the question is the institutional factors that do not impact policy compliance, or at least not directly. These are the rationales for institutional conformity and the control mechanisms at play. Neither social legitimacy nor economic gain drives public buyers to comply with SME-friendly procurement policy. Yet social legitimacy does have an indirect impact on policy compliance when moderated by procurement experience. Similarly, neither the coerciveness of SME-friendly policy nor perceptions around diffusion of SME-friendly practices have a direct effect on policy compliance. The same variables do indirectly affect compliance when moderated by the variables of organisation size and procurement involvement respectively. Together these findings disclose how the

institutional environment conditions compliance with SME-friendly procurement policy. Their import is discussed in section 5.2.

4.3.7 Significant control variables

The role of individual and organisation characteristics in accounting for compliance with SME-friendly procurement policy cannot go without some further mention. On their own the seven control variables account for 20.9 per cent variance in the predictive model (Adjusted $R^2 = .209$). Five of the seven variables are significant in the final iteration of the model (model 3). In terms of buyer attributes, the extent of procurement involvement in ($p < .05$), holding a procurement qualification ($p < .05$), and familiarity with the content of current Irish policy for the inclusion of SMEs in public procurement ($p < .01$) are significantly and positively related to compliance behaviour. Procurement experience is not related to compliance ($p = .722$). As referred to in 3.15.1, the literature is not altogether clear on whether procurement experience acts to promote or inhibit regulatory and policy compliance. From organisation characteristics, procurement structure ($p < .05$) and procurement maturity ($p < .01$) act as significant and positive predictors of policy compliance. These results were as expected. The size of the organisation had no effect on compliance ($p = .389$), which matches what has been reported in other studies. These findings have implications for practitioners, including policy makers and public sector managers, and will be explored further in section 5.4.

Table 26 Summary of hypotheses results

Hypothesis	Prediction	Factor	Sig.	Outcome
1a	<i>The social legitimacy attached to facilitating SMEs in contract competitions has a positive impact on policy compliance</i>	Social legitimacy	.908	Not supported
1b	<i>Economic gains from facilitating SMEs in contract competitions has a positive impact on policy compliance</i>	Economic gain	.231	Not supported
2a	<i>Perceived consistency between SME-friendly policy, value for money and EU procurement law has a positive impact on policy compliance</i>	Institutional rule consistency	.006	Supported
2b	<i>Organisational dependence on the state has a positive impact on policy compliance</i>	Dependence on institutional rule setter	.007	Supported
3a	<i>The compatibility of SME-friendly policy with the existing procurement goals of the organisation has a positive impact on policy compliance</i>	Compatibility of institutional pressure with organisational goals	.075	Supported
3b	<i>Constraints on professional discretion associated with SME-friendly policy have a negative impact on compliance</i>	Constraints on professional discretion	.080	Supported
4a	<i>Coerciveness of SME-friendly procurement has a positive impact on policy compliance</i>	Coercion	.752	Not supported
4b	<i>Perceived diffusion of SME-friendly procurement practices has a positive impact on policy compliance</i>	Diffusion of practices	.154	Not supported
5a	<i>Procurement experience positively moderates the relationship between the social legitimacy attached to facilitating SMEs in contract competitions and policy compliance</i>	Interaction 1	.092	Supported
5b	<i>Procurement involvement positively moderates the relationship between the perceived diffusion of SME-friendly practices and policy compliance</i>	Interaction 2	.082	Supported
5c	<i>Organisation size negatively moderates the relationship between the coerciveness of SME-friendly procurement and policy compliance</i>	Interaction 3	.021	Supported

4.4 Conclusion

The findings presented in this chapter reveal much about public buyers' compliance with SME-friendly procurement policy. In the first instance they tell us what public buyers are doing (Research Question 1). Based on their self-reported behaviours public buyers are, on average, neither rejecting nor acquiescing with government policy expectations. Their response is one of qualified compliance. Substantial variation is also evident in the extent to which individual policy measures are being implemented. This suggests that progress is being made on some dimensions of SME-friendly procurement - widening access to opportunities, for example - but less so on other dimensions, such as tackling mismatches between contract size and SME operating capacity. Important from both an empirical and a theoretical perspective, the findings specify the institutional conditions under which public buyers are more or less likely to exhibit compliance (Research Question 2). The institutional context of public procurement matters. So too does the content of SME-friendly procurement policy. The social legitimacy and economic rationales for institutional conformance are not significant; nor are the coercive and mimetic control mechanisms. Yet these same variables, excluding economic gain, indirectly impact policy compliance through their interaction with individual and organisation characteristics. Taken as a whole, the findings affirm the predictive validity of the institutionally-derived model of policy compliance ($\text{Adj. } R^2 = .273$). The fifth and final chapter is given over to discussion of the empirical findings, their contribution to the existing body of knowledge on SME-friendly public procurement, and what they mean for future research.

Chapter 5:

Discussion

5.0 Overview of chapter five

The previous chapter presented the empirical findings on policy compliance. Now this chapter moves to discussing the findings in greater detail. The point of departure is how public buyers are responding to SME-friendly procurement policy. Their recorded responses are also compared and contrasted with what is already established in the literature. The discussion then moves on in section 5.2 to unpacking institutional dynamics in public procurement and their influence on policy compliance. Thereafter, the empirical, theoretical and methodological contributions that the study makes to the public procurement field are spelled out in section 5.3. On each of these dimensions the study helps to advance the research agenda by addressing key gaps and weaknesses. As well as its academic contributions the study yields a number of policy-practitioner implications. These are addressed in section 5.4. If taken on board they will increase the probability that SME-friendly policy interventions will have their desired effect. A critical appraisal of the study is performed in section 5.5. This gives rise to recommendations in section 5.6 for how future inquiry on SME-friendly policy compliance can be strengthened and extended. Section 5.7 concludes the study with a summation of its main findings and a consideration of its future research prospects.

5.1 SME-friendly procurement

Section 4.1 described what Irish public buyers are doing in the face of institutional policy pressures to make procurement more SME-friendly. An in-depth discussion of these same descriptive findings is undertaken in this section. There are five strands to it. The first distils the essence of public buyers' compliance with SME-friendly policy. It explains that while compliance appears less than complete, the findings should not be interpreted in a too negative way as progress is being made. It also relates incomplete compliance to the idea of institutionalisation as an incremental

process. Section 5.1.2 examines the variation in rates of compliance across the individual policy measures and what this means for bringing about a SME-friendly public tendering system. The remaining sections situate the descriptive findings within the broader body of procurement and policy literature. To begin with, section 5.1.3 compares the compliance rates documented here with international assessments of SME-friendly purchasing practices. Section 5.1.4 does the same, only this time in respect of environmentally sustainable procurement practices. Section 5.1.5 then weaves the findings into the wider public policy literature and its arguments around intended versus realised policy outcomes.

5.1.1 Compliance with SME-friendly procurement policy

For a variety of reasons institutional and political expectations around what public procurement should deliver are not always matched by public buyers' practices (Prier and McCue, 2009). The findings presented in this study bear out this contention. Institutional prescriptions for SME-friendly purchasing are not being fully realised in the practices of public buyers. Evidently, saying SMEs should be better facilitated in public sector tendering is easier than making it happen in practice; sentiments that have previously been expressed in respect of SME-friendly policies generally (Bennett, 2008). Few public buyers in Ireland can be said to be fully complying with SME-friendly procurement policy: less than one per cent attain the maximum score on the policy compliance scale. Public buyers are, on average, exhibiting moderate or qualified compliance, indicated by the mean score of 14.54 out of 22. They are acting on some but not all of the measures designed to facilitate greater SME participation in contract competitions. Their response approximates to the 'compromise' position identified by Oliver (1991) in her typology of institutional responses. While preferable to the 'rejection' or 'avoidance' of institutional

demands, it falls short of 'acquiescence'. In the latter, policy is mirrored in practice, which is not the case here. There is, as Barley (1986) identified in his study on hospital practices, a gap between the institutional template and everyday procurement practice. The stance adopted by public buyers is redolent of 'reasonable administrative behaviour' (Van de Ven, 1983) or pragmatism as an institutional response logic (Seo and Creed, 2002). It also coincides with what we know about public buyers, which is that the majority are either 'practical idealists' or 'adapted realists' (Roman, 2015).

The findings on policy compliance are not to be interpreted in a wholly negative way. If it is true that public buyers are not fully living-up to policy expectations, it is also true that some effort is being made on their part to foster a more SME-friendly procurement system. For a start, few public buyers are assuming a defiant or rejectionist stance of the SME-friendly agenda. This is attested to by the fact that the minimum score is 5 and that 75 per cent of public buyers score 12 or higher (out of 22) on the compliance scale. Imperfect as the translation process may be, policy recommendations for the benefit of SMEs are beginning to feed through to everyday procurement practices. As a corollary, some of the barriers understood to inhibit SMEs' participation should diminish or even disappear. On this basis it can be claimed that progress is being made towards the avowed goal of having more SMEs compete for and win contract opportunities in the Irish public sector marketplace. At the very least, the situation that obtains now represents an improvement on what went before when SME-friendly procurement policy did not exist and public buyers had little in the way of official guidance or norms to orient their behaviour or spur them on.

There was an approximate four-and-a-half year interval between the official adoption of SME-friendly procurement policy in Ireland and measuring compliance with it for the purposes of this study. Four-and-a-half years would seem to be a sufficient timespan for public buyers to respond to the new policy dispensation and adjust their practices accordingly. That the effects of policy take longer to come to fruition is also possible. Observations made by Tolbert and Zucker (1996) are pertinent in this regard. They have argued that policy arrangements with a relatively short history tend to be only semi-institutionalised. While they may have attained a degree of normative acceptance, individuals will still remain sensitive to the relatively untested quality of new institutional rulesets and are inclined to actively monitor their effectiveness and acceptance by other actors. Only after this period of transition do new policy arrangements become fully accepted and taken-for-granted. SME-friendly policy is, ultimately, about changing public buyers' behaviour in the supply marketplace. Based on Tolbert and Zucker's (1996) insights, this behavioural change is likely to be more evolutionary than instantaneous, as public buyers unlearn or jettison old habits and practices and gradually move towards conformity with a new set of institutional rules and expectations around how public procurement should be managed and whose interests it should serve.

5.1.2 Compliance with individual SME-friendly policy recommendations

At the level of the individual policy measure there is significant variation in self-reported compliance behaviour. It ranges from a low of 40 per cent in the case of entertaining variants to specifications to a high of 88 per cent for adherence to government-advised insurance cover requirements, and much in between. Clearly, the extent to which public buyers are able or willing to display compliance varies according to the specific policy recommendation. For SMEs this will most likely

result in public procurement ameliorating in some respects but not in others, or at least not to the same extent. Gauged by buyers' policy compliance behaviour, public procurement is changing for the better in the ease with which SMEs can locate contract opportunities and gain access to contract competitions. SMEs are also more likely to have a better understanding of the tendering process through the wider provision of feedback and incur lower transaction costs in compiling and submitting tenders. The same self-reported buyer behaviours indicate that less progress is being made when it comes to tackling the mismatch between contract size and SMEs' organisational capacity, ensuring proportionality in the use of qualification criteria, and interacting with new suppliers and supply solutions. All this implies that while SMEs should find it easier to participate in public procurement in the coming years, success will still be beyond the reach of many.

The variegated nature of policy compliance detected here was previously picked up on in a 2013 survey of SME-friendly procurement in Ireland by Flynn and Davis (forthcoming). The same authors found SME-friendly procurement to be of a truncated form: 'low hanging fruit' measures were receiving support from the majority of public buyers while the more impactful measures were not being embraced to the same extent. In this study it is noticeable that the policy measures on which compliance is strongest are also those requiring least exertion. For example, just over three quarters of all public buyers permit tenderers to self-declare their financial capacity and insurance cover at the initial phase of competition. Doing so does not necessitate any substantial time outlay or mental effort on their part. If anything, it reduces their administrative workload and streamlines the tendering process to their advantage. The same can be said of the online advertising of contracts valued at €25,000 or more, the use of open tendering for contracts valued at

up to €134,000, and the online publication of contract award notices; all of which have high compliance rates. The policy measures that require greater time investment and professional application, such as researching the supply marketplace and dividing contracts into lots, are also the ones that have lower compliance rates.

5.1.3 Compliance in context: SME-friendly procurement policy

It is instructive to compare the findings of this study to what we already know on SME-friendly procurement policy. The common theme in studies to date is that the translation of policies into practice has been imperfect and irregular. Such conclusions can reasonably be drawn from EU-wide surveys in which only a minority of public buyers were always or habitually dividing contracts into lots (38 per cent), publishing PINs (10 per cent) or conducting market intelligence (41 per cent) (GHK and Technopolis, 2007; GHK, 2010). As with this study, these EU-wide surveys found SME-friendly procurement to be multi-faceted, with some measures being acted on more than others. The imperfect realisation of policy in practice has also transpired in nationally-focused studies: Flynn and Davis (forthcoming) in the case of Ireland; Murray (2011) in the case of Northern Ireland; and Glover (2008) in the case of England. The negative reported experiences of SME suppliers also underscore the gap between policy pronouncements and public buyers' adherence to them (Flynn and Davis, 2015b; GHK, 2010). Summarising, we can state that what public buyers are recorded as doing in this study in the face of institutional pressures to facilitate SMEs is broadly comparable to what has emerged elsewhere in recent years; albeit with signs of progress being made as SME-friendly policy embeds itself in the procurement field or, more precisely, in the cognitive schemas of public buyers.

5.1.4 Compliance in context: sustainable procurement policy

The findings of this study can also be located within the literature on sustainable purchasing, as these two areas frequently overlap in research studies (Flynn et al., 2012; Nijaki and Worrell, 2012; Preuss, 2009; Walker and Preuss, 2008). Like with SME-friendly procurement, policy-practice gaps are prevalent in sustainable and socially-responsible procurement. While the preponderance of research in this area is qualitative in form, it nonetheless indicates that policy expectations around sustainability – economic, social and environmental – are flattering to deceive (Coggburn and Rahm, 2005; Hasselbalch, Costa and Blecken, 2015; Morgan, 2008; Preuss, 2007; Thomson and Jackson, 2007; Walker and Brammer, 2009). Headway is being made, to be sure, but there is no getting away from the fact that the extent to which public buyers and their organisations feel motivated and empowered to purchase in a sustainable fashion typically falls short of policy aspiration. Tangentially, implementation deficits and policy-practice divides in sustainability are widely reported outside of public procurement (Krause, 2011; Nilsson, Eklund and Tyskeng, 2009; Pitt, 2010; Randhawa and Marshall, 2014). The problem, as such, is by no means unique to the procurement domain, but rather is symptomatic of a more wide-ranging phenomenon in which, for various reasons, sustainability-related policies only partially translate into practice.

5.1.5 Compliance in context: public policy

The findings of this study are a salutary reminder that there is nothing inevitable or guaranteed about SME-friendly procurement policy translating into practice. Murray (2012) stated as much in a critique of recent commitments by the UK government to reform public purchasing and foster increased SME involvement. For SME-friendly procurement to become reality public buyers must act on it. It is they, after all, who are the ‘policy implementers’; the ones responsible for giving effect to political

objectives and goals (Beyer, Stevens and Harrison, 1983). While this may seem a prosaic point, it has failed to register as much as it should in academic debate on SME-friendly procurement. Yet among policy scholars, the crucial mediating role that individuals at the organisational level play in the successful realisation of policies and regulations has long been recognised (Berman, 1978; Elmore, 1979; Lipsky, 1980; Matland, 1995; Van de Ven 1983). For them public policy exists and comes to life only in so much as those in frontline positions accept it and subsequently enact it. Leading on, it is argued that the decisions public sector employees make and the courses of action they embark on in response to institutional pressures becomes *de facto* policy (Lipsky, 1980). Viewed in this way, the qualified compliance reported in this study is *de facto* SME-friendly procurement policy in Ireland as at 2015.

5.2 Institutional determinants of SME-friendly procurement

The previous section discussed what public buyers are doing to give effect to SME-friendly procurement. This section moves the analysis up a level to discuss why they are doing it. Specifically, it examines the role of the institutional environment in driving or inhibiting policy compliance behaviours. The factors that have a direct and significant impact on policy compliance are assessed in sections 5.2.1-5.2.2. These encompass not only the institutional context of public procurement but also the content of SME-friendly policy as it relates to organisational goals and public buyer discretion. How the findings relate to and build on foregoing scholarship features prominently in these sections. The institutional factors found to have no direct influence on policy compliance, which include social legitimacy, economic gain, and coercive and mimetic control mechanisms, are examined in sections 5.2.3-5.2.4. Reasons are given as to why these factors have no direct impact on policy

compliance but do have an indirect impact. Section 5.2.5 takes a panoramic view of the findings and what they tell us about the overall relationship between institutional pressures and public buyers' propensity to comply with SME-friendly procurement policy. The final section 5.2.6 discusses individual and organisational characteristics and their role in enabling policy compliance.

5.2.1 Institutional context of public procurement

As hypothesised, consistency in the institutional ruleset governing public procurement directly and positively affects policy compliance. This finding accords with the tone of debate in contemporary public procurement research. A recurring concern flagged by scholars is that government makes multiple and oftentimes conflicting demands of public buyers (Astrom and Brochner, 2007; Bovis, 1998; Boyne, 2002; Erridge and McIlroy, 2002; Fee, 2002; Kidalov and Snider, 2011; Williams and Smellie, 1985). These institutional demands include not only optimising value for money and ensuring transparency and probity but, increasingly, supporting 'horizontal policies' for SME inclusion, environmental protection and social cohesion (Arrowsmith, 2010). Several case studies have probed how public buyers manage these demands (Cabras, 2011; Gelderman, Semeijn and Bouma, 2015; Loader, 2007, 2011; Peck and Cabras, 2010; Preuss and Walker, 2011; Walker and Preuss, 2008). The indications are that where a *prima facie* conflict is perceived to exist, it is SME inclusion that invariably loses out to a lowest price imperative and/or observation of EU law. The flipside, as shown in this study, is that where public buyers interpret value for money, legal diktats and SME inclusion to be broadly consistent, reconcilable and not mutually exclusive SME-friendly purchasing practices are more likely to follow. In such circumstances the latter may

even be regarded as a prerequisite for achieving best value for money and effectively using organisational resources.

In addition to how public buyers perceive and manage the interplay between institutional demands, the dependency relationship between government and public sector organisations acts to predict policy compliance. As expected, public buyers in central and local government authorities are more inclined to conform to the SME-friendly purchasing agenda relative to buyers in other public sector organisation types – state agencies, semi-state and utility companies and education institutes. This can be understood as a function of the proximity and visibility of the former cohort to the legislative and executive branch of government. Central and local government authorities are more integrated into the administrative apparatus of the state than the other public sector types. As such, they are subject to greater political oversight and fiduciary scrutiny. High levels of oversight and scrutiny accentuate the pressures on organisations and their members to be institutionally compliant with procurement directives (Blount and Hill, 2015). Central and local government authorities are comparatively more resource dependent and less financially independent than the other public sector organisational types. This raises the costs for them of not exhibiting institutional compliance (Brint and Karabel, 1991; Tolbert, 1985). These effects filter down to the operational level and go some way towards explaining the actions that public buyers do or do not take to facilitate SMEs in contract competitions.

5.2.2 SME-friendly policy content

The compatibility between policy content and established organisational practice also has direct implications for public buyers' propensity to be SME-friendly in their procurement decisions. Logically, public buyers working in organisations that are

committed to broadening their supply base and engaging with under-represented and atypical suppliers – SMEs, start-ups, ethnic minority-owned businesses – can be expected to receive SME-friendly policy recommendations in a positive light. Similar-type arguments have been made by Murray (1999, 2000 and 2001b), Pickernell et al., (2011) and Preuss (2007, 2009) in respect of an alignment between socio-economic development goals at organisation level and the facilitation of SMEs in public tendering competitions. The value-set of the organisation is also understood to have a conditioning effect on employees' procurement behaviour (Hawkins, Gravier and Powley, 2011). For organisations aiming to facilitate the broadest participation of suppliers, there is a natural fit or compatibility between this espoused goal and what SME-friendly policy prescribes, namely: making it easier for small firms to compete for public contracts. SME-friendly policy should also serve to reinforce and guide their own efforts to manage the procurement function according to values of social responsibility, inclusiveness and equality of opportunity. Of course, commercial and competitiveness considerations are also likely to play a part in this process. EU policy has long promoted this as the primary reason why public buyers and their organisations should be encouraging of SME participation in the first place (European Commission, 1990, 1992).

Apart from compatibility with existing organisation goals, the circumscribing effect of SME-friendly policy on public buyers' discretion is important in explaining compliance behaviour. Institutional prescriptions rule in some ways of acting and rule out others so that a standardised mode of behaviour is established for individuals to follow (Berger and Luckmann, 1966; Jepperson, 1991; Scott, 2008b). SME-friendly procurement policy is no different from any other institutional prescription in this regard. Where SME-friendly policy is understood by public buyers as a threat

to their operating autonomy, support for its recommended practices is less forthcoming. In these circumstances public buyers are likely to resent SME-friendly policy for compromising their flexibility and adaptability; a point which Seo and Creed (2002) highlighted in relation to institutional responses generally. They may also feel, as Rowan (1982) and Meyer, Scott and Deal (1983) observed of school managers in the education sector, that institutional conformance deprives them of the professional discretion required to manage the idiosyncratic challenges they face in their supply environments. One does not have to look far to see possibilities for this occurring. If, for example, the organisational priority for public buyers is to maximise cost savings by aggregating purchasing requirements and instituting long-term framework agreements with large suppliers, then SME-friendly policy starts to look like an encumbrance (Loader, 2007, 2011; Smith and Hobbs, 2001). SME-friendly policy is a 'one-size-fits-all' approach for purchasing. The public sector, by contrast, is heterogeneous as to its organisational priorities, purchasing practices and supply chain needs.

5.2.3 Rationale for institutional conformance

Sections 5.2.1-5.2.2 discussed the significant effects of institutional context and policy content on compliance with SME-friendly procurement. Now we turn to examine the non-significant institutional factors, starting with compliance rationales. Ideas around social appropriateness are central to institutional explanations of why individuals conform to rules, policies and prevailing societal norms (Meyer and Rowan, 1977; Meyer, 1979; Parsons, 1956; Selznick, 1948, 1996). More so again, it is fear of reputational damage from not acting in socially appropriate ways that is said to compel individuals to exhibit compliance with institutional standards (Dowling and Pfeffer, 1975; Suchman, 1995). Given the undoubted political and

societal support for SME involvement in public procurement (Loader, 2013, 2014), legitimacy considerations were expected to drive compliance with SME-friendly policy. This proved not to be the case. Of themselves, they do not appear to make public buyers more likely to act on government recommendations. What is interesting is that when buyers' experience is factored into the equation, social legitimacy becomes a significant driver of policy compliance. This makes sense from the perspective of experienced public buyers being more concerned with their reputation and, by implication, more likely to signal institutional conformity to their superiors and/or external stakeholders. The consequences for them from not doing so are likely to be greater than for individuals in the earlier stages of their public service careers and who have yet to fully establish their credibility and status in the organisation and beyond.

It was also predicted that economic gains to the public buyer's organisation or department from facilitating SMEs in contract competitions would act as an impetus for policy compliance. Other public procurement studies have shown that economic gains engender rule compliance (Gelderman, Ghijsen and Schoonen, 2010). Outside public procurement the connection between the competitiveness impact of regulations and norms on organisations and their subsequent adherence to them has also been confirmed (Goodstein, 1994). That no such effect was returned here implies that economic gain alone is insufficient to elicit public buyers' compliance. It could be that public buyers have yet to make the connection between the competitive benefits of having more SMEs compete for contracts and the enabling role that government policy recommendations play in this process. Alternatively, public buyers might not be fully convinced that the trajectory of government policy is the best way to boost SME participation rates in contract competitions. Finally,

and notwithstanding the budgetary constraints that public sector organisations in Ireland are operating under, we cannot dismiss the possibility that the public sector context of the study is rendering the relationship between economic gain and institutional compliance tenuous. So while public buyers recognise that, in principle, having more SMEs compete in contract competitions works to their organisation's economic advantage, they do not feel motivated or incentivised to take the necessary steps to make this a reality.

5.2.4 Control mechanisms behind SME-friendly procurement policy

As with the rationales for institutional conformance, control mechanisms are not directly significant in influencing policy compliance. The coerciveness behind SME-friendly procurement, for one, does not cause public buyers to incorporate policy recommendations into their procurement practices. This runs contrary to what has transpired on the relationship between sanctions and procurement rule compliance in some studies (Gelderman, Ghijsen and Schoonen, 2010; Mwakibinga and Buvik, 2013; Sang and Mugambi, 2014). Yet it is consistent with what has emerged elsewhere concerning the non-significant effect of coercion on adherence to centralised framework agreements (Karjalainen and Von Raaij, 2011) and adoption of sustainable supplier development programs (Sancha, Longoni and Gimenez, 2015). The moderating effect of organisation size on the coercion-compliance relationship offers some sense of what is going on. The effect is significant but negative, indicating that as organisation size increases, the impact of coercion on policy compliance starts to taper. This is consistent with recent findings by Blount and Hill (2015), which show a negative relationship between organisation size and adherence to executive orders for US public agencies to contract more with minority-owned suppliers. It also needs to be seen in the context of claims that large

organisations are able to shield their operations from the vagaries of the institutional environment and even counteract coercive and normative pressures (Greenwood and Suddaby, 2006; Suddaby, Greenwood, and Cooper, 2007).

The diffusion of SME-friendly purchasing practices throughout the public procurement field does not directly influence policy compliance, either. The starting assumption in proposing this hypothesis was that public buyers who believed SME-friendly purchasing to be widespread among their professional peers would be led to mimic their behaviour. Other procurement-related studies have observed mimetic forces as significant in the decision of firms to adopt sustainable and environmentally-friendly purchasing practices (Hoejmose, Grosvold and Millington, 2014; Sancha, Longoni and Gimenez, 2015; Zhu, Sarkis and Lai, 2013). The institutional literature is also replete with instances of mimetic behaviour in everything from corporate philanthropy (Galaskiewicz and Wasserman, 1989) to TQM (Westphal, Gulati and Shortell, 1997). While it may not have a direct impact, the diffusion of SME-friendly purchasing practices does have an indirect impact through procurement involvement. The latter refers to the extent to which procurement activity constitutes a public servant's work role. Diffusion of practices as a driver of policy compliance becomes significant as procurement involvement increases. We can quite easily rationalise this relationship. Public servants who are heavily involved in procurement are more aware of their peer buyers' behaviour and have a career interest in following sector and professional trends. If they see SME-friendly purchasing practices to be commonplace, they too are more likely to support such practices. Conversely, individuals not majorly involved in procurement are less aware of and less interested in industry developments; and hence less prone to mimetic pressures.

5.2.5 Overarching assessment of institutional effects

Undoubtedly, the institutional environment has a significant role to play in explaining compliance with SME-friendly procurement policy. The factors that primarily make a difference are linked to the institutional context – rule consistency and organisational dependence on the rule setters – and the actual content of SME-friendly procurement policy, both in its relationship to organisational goals and its effects on the professional discretion of individual buyers. These, rather than social-economic fitness or control mechanisms, directly influence the ability and willingness of public buyers to translate government policy recommendations into everyday purchasing practices. Taken together, the institutional predictors of policy compliance coalesce to form one crucial question, ‘how does the goal of facilitating SMEs in contract competitions play out against the various other obligations, mandates and pressures placed on public buyers and their organisations’? As with all new institutional demands SME-friendly procurement policy introduces an element of tension to the status quo: existing ways of behaving and thinking are challenged and new ways are put forward as being more legitimate and socially appropriate. The degree to which public buyers’ perceive and/or experience these tensions and how, if at all, they are able to manage them in ways that satisfy the expectations of both internal and external stakeholders is integral to explaining their compliance with SME-friendly policies.

As mentioned above, what emerges from this study is consonant with foregoing empirical observations and commentary. Several studies have averred to tensions and contradictions in the institutional ruleset governing public procurement as among the main reasons why public buyers struggle to act on SME-friendly policy recommendations. This theme certainly comes to the surface in successive

investigations of UK public buyers by Loader (2007, 2010, 2011). In these the implementation of SME-friendly policy hinges on whether it is seen to support or compromise the overriding goal of cost minimisation. If it is the latter, policy implementation suffers irrespective of any good intentions that public buyers have towards small suppliers. As Peck and Cabras (2010) concluded, cost minimisation tends to be the least controversial and most expedient option for public buyers. Problems around external adaptation and institutional inconsistency, rather than individual motivation or organisational culture, have also been shown by Preuss and Walker (2011) to stymie the realisation of environmentally conscious procurement. Granted, the evidence is not uniformly negative and examples of public buyers successfully reconciling SME inclusion with value for money do exist (Erridge, 2007; Erridge and Hennigan, 2012). There is, however, no avoiding the pervading sense that inconsistency among procurement policies, and friction between these same policies and organisational realities, militate against SME-friendly practices more than any other factor.

5.2.6 Individual and organisational influences on policy compliance

Quite apart from external institutional forces, the characteristics of public buyers and their organisations are important in explaining compliance behaviour. Public buyers are not a monolithic group. For some, purchasing is ancillary to their primary work role. Others spend most, if not all, of their work time involved in purchasing on behalf of their organisation. In this study those belonging to the latter cohort are more policy compliant. We should not be surprised by this relationship given that procurement involvement is associated with time, resources, ability and motivation to act on policy recommendations (Flynn and Davis, forthcoming; Prier and McCue, 2009). In a similar way, procurement professionalism is a precursor to SME-friendly

purchasing. Qualifications and training are understood to be essential if public buyers are to act strategically and have the confidence to manage the legal and policy complexities of modern-day public procurement (Caldwell et al., 2005; McCue and Gianakis, 2001; Tassabehji and Moorhouse, 2008). Awareness of the detail of SME-friendly procurement policy is also a prerequisite to compliance. In discussing responses to institutional policy pressures it is easy to assume that the public buyer population is universally familiar with what is expected of them. This is not always the case and familiarity, or lack of it, can have a decisive impact on the successful realisation of procurement policy at the organisational level (Gelderman, Ghijzen and Brugman, 2006; National Institute of Government Purchasing, 2013).

The characteristics of the procurement function are also integral to explaining compliance with SME-friendly procurement. Having a centralised procurement structure is conducive to policy compliance to begin with. Procurement centralisation delivers greater control and co-ordination when managing institutional demands and initiating changes in purchasing practices across the organisation (Karjalainen, 2011; Trautmann, Bals and Hartmann, 2009). Centralisation also allows a critical mass of knowledge, capability and routines to build-up around purchasing. Public buyers can then draw on it to support and guide their efforts for SME-friendly purchasing. A mature and developed purchasing role that is integrated with other functions, as outlined by Reck and Long (1988), also promotes policy compliance. Procurement role maturity implies a degree of expertise when it comes to navigating the policy-political environment. It also suggests that there will be a more finely tuned appreciation over how SME-friendly purchasing can help to deliver corporate strategy as it concerns public interest goals. Identifying the impact that these individual and organisational characteristics have on policy compliance is

of scholarly interest. It is also of interest from a policy-practitioner perspective as it underlines the link between professionalising the procurement function and policy effectiveness. There is further discussion of this point in section 5.4.

5.3 Research contribution

Research at the intersection of SMEs and public procurement is still at a nascent state of development (Snider and Rendon, 2008). While progress is being made on various fronts, such as untangling the predictors of SMEs' participation and success in tendering (McKevitt and Davis, 2013; Reijonen, Tammi and Saastamoinen, 2014; Temponi and Cui, 2008), there is still much that remains to be discovered and known. The outputs from this study help to close the knowledge gap as they make a number of important and timely contributions to SME-friendly procurement (see Table 27, pg. 270). These are detailed in the proceeding sections. Section 5.3.1 sets out the empirical contributions, namely: the comprehensive assessment of compliance with SME-friendly procurement policy and the factors that promote or inhibit it. Section 5.3.2 articulates the theoretical contributions. Featured here is the originality of using institutional theory in empirical research on SME-friendly procurement. Equally, highlighting public procurement as an institutional context and area of interest for institutional theorists is novel. The final section 5.3.3 clarifies the methodological contributions of the study. These include the construction of a compliance index for SME-friendly procurement policy, the development of a predictive model of policy compliance, the use of three-step hierarchical regression, and the utilisation of an innovative strategy for surveying public buyers.

5.3.1 Empirical contribution

Empirically, this study contributes to the public procurement field in a number of ways. Firstly, it sheds light on how public buyers are responding to institutional

pressures aimed at facilitating SME access to public procurement. For all the interest that has been generated around SME-friendly policies in public procurement, surprisingly little evidence has been adduced on the effectiveness of these policies and, before this again, on whether they are translating into practice (OECD, 2013). This led Flynn and Davis (2015b) to opine that we know more about the rhetoric of SME-friendly public procurement than we do about the reality. The findings to come out of this study help to bring us closer to the reality of SME-friendly procurement. On foot of them we are in a position to see beyond what public buyers are *supposed* to be doing and instead focus on what they *are* doing in practice. And what they are doing, on average, is adhering to some but not all of the specific recommendations intended to increase SME involvement in contract competitions - a reminder that there is nothing inevitable about policy, or the government pledges lying behind it, coming to actualisation. In essence, the study addresses the previously unanswered question of what happens after a government disseminates policy recommendations for the benefit of SMEs in public procurement.

Arguably, this study makes an even more important empirical contribution by providing evidence on the predictors of compliance with SME-friendly policy. If there is a paucity of research on what public buyers are doing in respect of SME-friendly policy recommendations, there is a near absence of investigation into the determinants of their behaviour. The reason for this is that scholarship has privileged descriptive-qualitative over predictive-quantitative methodological strategies. While in-depth and nuanced insights come courtesy of descriptive analysis as, for example, in Cabras (2011), Erridge and Hennigan (2012), McKevitt, Flynn and Davis (2014) and Walker and Brammer (2009), they reveal little about causative effects in the context of SME-friendly purchasing; at least little that can be extrapolated to the

population of interest. The findings of this study begin to explain public buyers' actions in the face of institutional policy pressures to make procurement more accommodating of SMEs. By no means definitive, they nonetheless bring a level of explanatory sophistication to SME-friendly procurement that was previously missing from the literature. They also enable comparisons to be made with related lines of inquiry on regulatory compliance in public procurement (Blount and Hill, 2015; Gelderman, Ghijsen, and Schoonen, 2010; Mwakibinga and Buvik, 2013) and the adoption of sustainable procurement programmes (Hoejmose, Grosvold and Millington, 2014; Preuss and Walker, 2011; Sancha, Longoni, and Gimenez, 2015).

Following on from the above, this study demonstrates in detail how the institutional environment shapes and moulds public buyers' purchasing behaviour. Surprisingly, the impact of institutional forces on SME-friendly purchasing practices has gone un-explicated up to this point. Prior to this study, neither public procurement scholars nor institutional theorists had tested the causative effects of institutional factors on public buyers' ability and willingness to facilitate SMEs. The findings presented here can be seen as a timely and warranted corrective to this omission. They pinpoint the institutional factors, mainly to do with the context of public procurement and the content of SME-friendly policy, which have a significant impact on compliance behaviour. Just as important, they clarify the institutional factors that have no ostensible effect on compliance. Equally, they draw attention to the way in which some institutional forces affect compliance behaviour in interaction with individual and organisational variables. Resulting from these various findings we now have a more lucid and evidence-informed view of how exactly the institutional environment determines the likelihood of public buyers' conforming to SME-friendly policy expectations. This provides a solid platform on which future inquiries can be

undertaken into institutional dynamics and their effects on SME-friendly purchasing in public sector contexts.

5.3.2 Theoretical contribution

The theoretical contributions of this study are manifold. At a most fundamental level it does something research studies on SME-friendly public purchasing have singularly neglected to do - it theoretically grounds its phenomenon of interest. This is done by taking an institutional perspective on SME-friendly purchasing and then hypothesising relationships between key institutional concepts and compliance behaviour. Although theories relating to principal-agent interactions, transaction costs and institutions have all been invoked in discussions on SME-friendly public purchasing (Erridge, 1998; Kidalov and Snider, 2011, 2013; Soudry, 2007; Yukins, 2010), there has been no attempt to operationalise them. Where primary research has been conducted in this area, it has not been theoretically anchored (Fee, Erridge and Hennigan, 2002; Loader, 2007, 2011; MacManus, 1991). Against these two trajectories of untested theory and a-theoretical empirical inquiry, the hypothetico-deductive approach taken here breaks new ground. It moves academic debate on SMEs and public procurement from 'what' questions that produce descriptive answers to 'why' questions that produce explanatory answers. As noted in section 5.3.1, scholars have paid more attention to the former than the latter. A failure to fully engage with and exploit theory has made this inevitable. The application of institutional theory in this study directly addresses this deficiency. Like any good theory it untangles some of the complexity surrounding SME-friendly purchasing and offers a plausible story of public buyers' compliance with it (Bacharach, 1989; Sutton and Staw, 1995).

Apart from the novel matching of institutional theory to SME-friendly purchasing, the way in which this study went about operationalising and testing institutional theory is significant. To identify institutional concepts pertinent to explaining compliance behaviour Oliver's (1991) predictive framework was employed. While this same framework has already been used to investigate organisational responses to family-friendly work policies (Goodstein, 1994; Ingram and Simons, 1995), it had never been used in a public procurement context before this study. The strength of Oliver's (1991) framework, and its value here, lies in its comprehensiveness. It encompasses not only rationales for exhibiting institutional conformance and the control mechanisms for bringing about conformance, but also the context of the institutional setting and the content of institutional pressures. In other procurement-related studies institutional theory has been conceptualised and operationalised by reference to coercive, normative and mimetic pressures (Sancha, Longoni and Gimenez, 2015; Zhu, Sarkis and Lai, 2013). Their approach represents a less exhaustive way to capture institutional forces compared to Oliver's (1991) framework, although researchers should remain open-minded about using it in future inquiries (see section 5.6.5). Altogether, the positive findings returned in this study confirm the suitability and validity of Oliver's (1991) framework for predicting compliance with SME-friendly procurement policy.

Operationalising and testing institutional theory also benefits the wider field of public procurement. At a general level it strengthens its theoretical underpinnings. More specifically, it introduces and makes the case for greater exploitation of institutional perspectives in public procurement research. An on-going issue in the public procurement domain is the under-exploitation of theory. In a review of public procurement research published since 2001 Flynn and Davis (2014) determined that

the field was under-theorised compared to affiliated disciplines such as operations and supply chain management, with less than one in three published articles being theoretically framed. The same authors also commented on the dearth of studies employing institutional theory perspectives. Their observations and resulting concerns were not the first to be aired on this issue. Earlier, Snider and Rendon (2008) criticised the lack of theorising on policy in a public procurement context. Other scholars have also alluded to the need for greater theoretical application in the interests of understanding, explaining and predicting contemporary procurement phenomena (McCue and Prier, 2008; Snider, 2006; Yukins, 2010). Therefore, using an explicit theoretical frame of reference, as this study does, helps to advance public procurement as a sub-discipline within management science and strengthens its scholarly credentials. It also makes it more likely that research will end up yielding valuable insights for policymakers and practitioners (Dimitri, 2013). This latter aspect will be subject to further discussion in section 5.4.

The accent on the discussion thus far has been on what institutional theory brings to our understanding of SME-friendly procurement. It is just as valid to see this relationship in reverse. Public procurement is an ideal context for examining institutional forces in action. It is shaped by political forces more so than market forces; and supra-national rules and conventions, national policies, and societal norms and expectations all combine to influence the ‘rules of the game’ (Baily, 1978; Rainey and Bozeman, 2000; Snider et al., 2013). In spite of its obvious merits as a research context and its economic weight – 16 per cent of EU GDP - it has not yet piqued the interest of institutional theorists. By contrast, the education, health and financial sectors have been the subject of extensive investigation by them since the emergence of ‘new institutionalism’ three decades ago (Galvin, 2002; Meyer,

Scott and Deal, 1983; Meyer, Scott and Strang, 1987; Rowan, 1982; Scott et al., 2000; Suddaby, Greenwood and Cooper, 2007; Tolbert, 1985). In moving beyond these traditional research foci and emphasising public procurement, this study helps to stretch the boundaries of institutional theory. It appraises theorists on how institutional forces take effect in the idiosyncratic public procurement environment. It also gives pause for thought over how institutional pressures are understood and modelled generally. For instance, it reveals that the effect of institutional forces on compliance behaviour is not always direct and can be moderated by the characteristics of the individuals and organisations subject to them.

5.3.3 Methodological contribution

Several valuable methodological and research design contributions also arise from the study. The theoretically-informed model advanced for predicting public buyers' compliance is original and represents a first in SME-friendly procurement. Limitations notwithstanding, it provides the basis for future research to be carried out. As one possibility, scholars can re-test the model in different contexts and compare their results to those produced here. Alternatively, they may wish to adjust or revise some of its predictors before testing it among their country's population of public buyers. In recent years attempts have been made to explain public buyer behaviour, resulting in the development of predictive frameworks. Examples include Preuss and Walker's (2011) model of psychological barriers to sustainable purchasing and Gelderman, Ghijsen and Brugman's (2006) theoretically eclectic model of public buyers' adherence to EU Procurement Directives. The policy compliance model presented in this study complements these earlier efforts and even builds on them. It takes cognisance not only of the direct effects that independent variables (institutional factors) can have on policy compliance outcomes, but also the

indirect or interactive effects. This is reflected in the use of a three-step hierarchical regression technique to test the model, which is another first-time addition for research at the intersection of SMEs and public procurement.

Central to this study is the creation of a composite measure or index of compliance with SME-friendly procurement policy. Previously no such index existed. Its design and use here is novel and innovative. The index itself is comprehensive, encompassing no fewer than 19 measures that are individually and collectively designed to facilitate SME access to public contract competitions. Inter alia, these are aimed at increasing the visibility of contract opportunities, making it easier to access contract competitions, tackling contract size barriers and alleviating the administrative burden associated with tendering. The measures are derived from Irish government policy as it concerns SMEs in public procurement (Department of Finance, 2010; Department of Public Expenditure and Reform, 2014). Irish policy is itself derived from EU policy in this area, most recently the *European Code of Best Practices Facilitating Access by SMEs to Public Procurement Contracts* (European Commission, 2008c). The same can be said of other EU Member States. Owing to the similarities in SME-friendly procurement policies across the EU it is eminently feasible for the index to be used as a research instrument internationally. Of course, adjustments to such measures as financial thresholds for the open advertising of contracts and insurance cover requirements will likely be required. Issues around ‘localisation’ aside, the public procurement research community now has at its disposal a comprehensive instrument to measure compliance with SME-friendly procurement policy.

A third methodological contribution made by this study relates to its innovative approach to data collection. Accessing public buyers in survey-based investigations

poses a perennial challenge for researchers. Indeed, it is surely among the reasons why comparatively few population-wide surveys of public buyers have been produced to date. The issue stems from the fact that many public sector organisations do not have a dedicated purchasing officer or purchasing unit and responsibility for purchasing is often diffused throughout the organisation (Thai, 2001). Identifying a survey contact point and key informant is made difficult in these circumstances. This study exemplifies how the ‘data capture’ that results from public buyers migrating to e-procurement can help researchers to overcome this impediment. In addition to making the public purchasing system more efficient, e-procurement has the extra benefit of documenting and tracking individual public buyers. Such population information is invaluable for survey purposes, assuming that researchers can secure access to it. It was successfully exploited in this study to survey the Irish population of public buyers. The financial cost incurred was negligible, the labour effort was minimal, and all responses were gathered within two weeks. Even more importantly, the total number of responses received was sufficient and no problems were detected with respondent representativeness. Given these many positives, researchers should emulate this approach when looking to survey public buyers or even suppliers.

Table 27 Summary of research contribution

	Action	Contribution	Significance
Empirical	Measures the extent to which the Irish population of public buyers is complying with SME-friendly policy recommendations	Among the most comprehensive assessments of compliance with SME-friendly procurement policy performed to date	Demonstrates that public procurement policy does not always translate into practice as intended and that policy-practice divides exist
	Operationalises and tests (institutional) predictors of compliance with SME-friendly procurement policy	First survey-based evidence on how the institutional environment affects compliance with SME-friendly procurement policy	Identifies the institutional factors that are significant in promoting and inhibiting compliance with SME-friendly procurement policy
Theoretical	Takes an institutional theory perspective in examining public buyers' responses to SME-friendly policy	The first application of institutional theory (or any theory) to SME-friendly procurement	Helps to move research on SME-friendly procurement beyond description and towards prediction and explanation
	Operationalises Oliver's (1991) conceptual framework in order to predict and then test policy compliance	First time Oliver's (1991) conceptual framework has been operationalised in public procurement and/or SME-friendly procurement	Oliver's (1991) conceptual framework is shown to have validity in predicting compliance with SME-friendly procurement
	Highlights public procurement as a relevant but under-explored context for institutional theory perspectives	Among the few institutionally-focused studies that have researched public procurement issues	Public procurement has received scant attention in institutional studies. Results indicate that it is a fruitful context for testing and developing institutional theory
Methodological	Devises a predictive model of compliance with SME-friendly procurement policy	First theoretically-informed model of compliance with SME-friendly procurement policy	Focuses on the antecedents of policy compliance in public procurement. Complements existing predictive models on regulatory compliance and sustainability in public procurement

	Creates a compliance index for SME-friendly procurement	First index of this kind	Enables compliance with SME-friendly procurement policy to be measured in a systematic and standardised way across EU Member States
	Uses a three-step hierarchical regression technique to examine predictors of compliance with SME-friendly procurement policy	First use of multiple regression technique in research on SME-friendly procurement	Inferential statistical analysis of public buyer behaviour is limited
	Exploits Ireland's public procurement web-portal to survey the public buyer population	Among the first nationally representative e-surveys of public buyers	Overcomes the hurdles associated with accessing public buyer populations for survey-based inquiry

5.4 Policy-practitioner implications

Apart from its academic contributions the study has value in the realm of policy making and public administration. Coming out of it are several avenues for the relevant stakeholders - legislators, policy makers and public sector managers - to explore with a view to advancing the SME-friendly procurement agenda. Theoretically-informed scholarship, after all, should not only contribute to scientific knowledge but also illuminate business practice and lead to better organisational and economic outcomes (Litchfield, 1956; Palmer, 2006; Van de Ven, 1989). Producing research results that are not only scientifically valid but also actionable and relevant to practice also exemplifies the critical realist philosophical outlook (Hammersley, 1992), which underpins this study. The first five implications of this study concern policy making. Section 5.4.1 is a reminder for elected representatives that policy is not self-executing and taking its implementation for granted is ill-advised. Section 5.4.2 addresses the importance of overseeing institutional consistency and not confusing public buyers with a farrago of policies. Section 5.4.3 questions the efficacy of having a generic SME-friendly procurement policy for the entire public sector, and tentatively proposes a more sector-based strategy. The need to regularly monitor SME-friendly policy implementation and create metrics of public buyer behaviour is highlighted in section 5.4.4. Section 5.4.5 presses the case for professionalising public purchasing by having more full-time, accredited buyers. The sixth and final point is directed at senior public sector managers. It exhorts them to promote value-adding, strategic roles for purchasing within their organisations.

5.4.1 Policy management

Public policy is not self-executing but depends on organisations and their employees to make it a reality (Beyer, Stevens and Harrison, 1983). SME-friendly procurement

policy is no exception to this maxim, as procurement scholars have recently noted (Georghiou et al., 2014; Murray, 2012). Legislators and senior public administrators would do well to take this on board in their attempts to bring about a more SME-friendly public procurement system. The act of formulating policy and subsequently disseminating it to public sector organisations and their employees does not automatically solve the problem of SMEs' under-representation in public procurement. It is only a first step in bringing about procurement change; and change takes time, effort and the making available of additional resources and supports as required (Austen and Seymour, 2009). Simply assuming that policy translates into practice is complacent and increases the prospect that gaps will appear between what is intended and what is actually realised in organisational practice (Berman, 1978; Elmore, 1979; Lipsky, 1980). What is more, political representatives have to resist the temptation to treat public procurement as some sort of a panacea or 'silver bullet' for socio-economic goals, be they in relation to SME competitiveness (Nicholas and Fruhmann, 2014), innovativeness (Uyarra and Flanagan, 2010) or anything else. Political expediency and short-termism of this type is neither in the interests of public sector organisations nor the SME suppliers whom policy is designed to empower.

5.4.2 Institutional rule consistency

The effectiveness of any institutional prescription is contingent on the ability and willingness of individuals to act on it (Oliver, 1991). As demonstrated in this study, ability and willingness are influenced by prevailing institutional conditions. The onus is on legislators to ensure that institutional conditions are conducive to the realisation of SME-friendly procurement policy. Essentially, this means preserving balance and consistency in the rules and norms governing public procurement at

national level. Too often legislators have been guilty of making multiple, conflicting demands of public buyers (Boyne, 2002; Erridge and McIllroy, 2002; Gelderman, Semeijn and Bouma, 2015; Matthews, 2005). The objective of having more SMEs competing for and winning public sector contracts has been undermined as a result (Loader, 2007, 2011). Part of the problem has been a failure to adequately evaluate and model how exactly new policies or initiatives will play out against the pre-existing policy framework. To prevent this from happening in future legislators are advised to assess the impact of any new proposal before adopting it. Policy content should be scrutinised for any obvious inconsistency between it and current goals and policy trajectories. Illustrative of how good intentions can produce unforeseen problems, Baden, Harwood and Woodward (2011) found that the use of ‘green’ and socially responsible criteria by purchasing organisations added to the administrative burden on small suppliers. Emphasis is increasingly placed on integrating procurement policy with overarching socio-economic goals (Arrowsmith, 2010; Erridge, 2009). It is imperative that this does not come at the expense of internal coherency in the institutional rule set governing public procurement.

5.4.3 Sector-specific policies

In endeavouring to promote the involvement of small firms in public contract competitions the Irish government has come up with a single policy for all public sector organisations. SME-friendly purchasing policy is, in this sense, ‘one-size-fits-all’ with no distinction made between the different public sector categories. This mirrors the stance adopted in the UK (Cabinet Office, 2011) and in the EU (European Commission, 2008c). The advantage of the universal approach lies in its simplicity. A single suite of policy recommendations is communicated to public buyers. SMEs and their representative groups also know that there is a common

standard expected of public buyers. The disadvantage is that it is insensitive to the heterogeneous character of purchasing across the public sector. Regardless of their supply requirements or procurement strategies, all public sector organisations are presented with the same set of SME-friendly guidelines. Yet as implied in other studies (Pickernell et al., 2011) and as attested to by recent profiling of government departmental spend in the UK (Cabinet Office, 2013), the scope for contracting with SMEs varies throughout the public sector. The recommendation here is to explore options for bespoke, sector-specific SME-friendly procurement policies. Loader and Norton (2015) recently made the very same recommendation, positing that generic SME-friendly policy should be complemented with sector specific initiatives and that public buyers should be afforded latitude to adapt policies as the situation dictates. In line with opinion offered elsewhere, public buyers need to be involved in and consulted with on this issue (McCue and Roman, 2012; Rendon and Snider, 2010). Not only will this engender buy-in and a sense of ownership at organisational level, it will also lead to more achievable and effective policies.

5.4.4 Monitoring policy

In a recent review of its members' public procurement policies the OECD (2013) expressed concern at the low level of monitoring and assessment of SME-friendly measures - indicative of public administrators not following through on their commitments and being myopic (see section 5.4.1). The contention here is that SME involvement in public procurement stands to benefit appreciably from improved policy oversight. Evidence from elsewhere attests to the contributory role that monitoring and assessment plays in procurement regulatory compliance (Hasselbalch, Costa and Blecken, 2015; Mwakibinga and Buvik, 2013). In practical terms, monitoring could involve collating data on the number of SMEs competing

for contracts, which is one proxy measure of procurement inclusiveness. Reporting could also include outcome variables, such as the number and value of contracts awarded to SMEs. This will not only reinforce desired behaviours for SME-friendly procurement among buyers, it will also furnish policy makers with valuable data on the effectiveness of their initiatives at local level (Blount and Hill, 2015; Martin, Berner and Bluestein, 2007). Positive steps have been taken in Ireland of late to analyse the profile of procurement spend at the macro level (Office of Government Procurement, 2015), as they have in the UK (Cabinet Office, 2013). The recommendation made here for continuous monitoring of SME-friendly policy would supplement these initiatives while supporting more evidence-based policy making going forward.

5.4.5 Professionalisation

The case for professionalising public procurement has been made repeatedly (Caldwell et al., 2005; McCue and Gianakis, 2001; McKevitt et al., 2012; Prier, McCue and Behara, 2010; Tassabehji and Moorhouse, 2008). Among these and other scholars there is a consensus that the increasing complexity of supply chain management demands highly professional public buyers. If procurement is to realise its potential as a strategic function, then it must be staffed by competent individuals with the requisite mix of commercial acumen and regulatory-policy awareness. Skills and competency development is also high on the agenda of professional and industry bodies, evident in the emergence of a *Global Standard for Procurement and Supply* (Chartered Institute of Procurement and Supply, undated²). As with foregoing studies and reports (Coggburn and Rahm, 2005; Hasselbalch, Costa and Blecken, 2015; Morgan, 2008; NERA Economic Consulting, 2005), the findings presented here point to the criticality of professionalism as a lever for procurement

reform. In particular, they underline the importance of holding a relevant qualification and working predominantly in procurement as factors that support SME-friendly behaviours. The message for policy makers is unmistakable: the success of any initiative is heavily dependent on having a cadre of full-time, qualified public buyers. Efforts ought to be directed at increasing the number of dedicated public buyers and, at the same time, encouraging and materially supporting those currently involved in procurement to pursue professional qualifications and accreditation. The chances of SME-friendly policy, or any other procurement policy, translating into practice can only stand to benefit as a result.

5.4.6 Senior management support

The final policy-practitioner implication relates to the role of senior public sector managers. It is clear from the study's findings that the structure and maturity of the procurement function is significant in explaining policy compliance, as it is in delivering value for the organisation (Reck and Long, 1988). These aspects of organisational functioning are under managerial prerogative. By acting as advocates for a more centralised and strategically positioned procurement function within the organisation hierarchy, senior managers can play their part in making sure that policy translates into practice. Senior managers can champion procurement so that it is professionally staffed, properly resourced, integrated with all other organisational functions and capable of delivering on corporate objectives (Snider, 2006). Out of this comes an enhanced organisational ability to proactively manage policy expectations and match them to existing procurement goals. In policy studies the evidence points to the critical role that 'policy champions' play in driving the adoption of environmentally sustainable structures and practices (Krause, 2011). Examples can also be found of top management support being indispensable when

making the transition from an operational to a more value-adding procurement function (Flynn et al., 2012) and driving socially responsible procurement (McCarthy, 2006; Nijaki and Worrel, 2012; Thomson and Jackson, 2007). While the Irish government has already instigated procurement reform initiatives at organisational level, more can be done through training, advocacy and material support to assist senior public managers in this regard.

5.5 Limitations

From the vantage point of critical realists all social inquiry is fallible (Seale, 1999a). This study is no exception. Even with its empirical, theoretical and methodological contributions and practitioner benefits it contains limitations. Some of these have been touched on in earlier chapters, such as in the discussion on fixed research designs and the data collection strategy, but are re-assessed here in light of the findings. Attending to this or any study's limitations is always to be recommended. Firstly, it exemplifies the critical realist ideals of transparency and openness in social inquiry. Secondly and relatedly, it allows readers to make a balanced judgement on the calibre of the study. Thirdly, it indicates where future research can be improved and made more scientifically robust based on lessons learned and the benefit of hindsight. The limitations identified here cut across the study. The first two, which are dealt with in sections 5.5.1-5.5.2, relate to the research focus and the theoretical lens used. The remainder, which are methodological in nature, are interrogated in sections 5.5.3-5.5.6. These include the drawbacks inherent to surveying, the transferability of the research findings, the reliance on public buyers as sole respondents, and the operationalisation and measurement of the independent and dependent variables. A summary of limitations as well as ways through which they can be rectified is provided in Table 28 (pg. 290).

5.5.1 Research focus

Emerging from this study is new evidence on public buyers' compliance with SME-friendly procurement policy. What the study does not provide is evidence on outcomes for SMEs. Policy compliance rather than SME participation and success rates is the object of interest and, for the purposes of statistical analysis, the dependent variable. This can be viewed as a limitation. Expanding on this point, the study does not answer the question of whether policy compliance is associated with SMEs' participation and success rates in contract competitions. Some may argue that it is these performance outcomes that are of most consequence in the debate over SME involvement in public sector contracting. What is more, with a few exceptions (Pickernell et al., 2011; Qiao, Thai and Cummings, 2009), there is little in the way of reliable, survey-based evidence or theorising on public buyers' propensity to use SMEs as suppliers. Having said this, caution needs to be exercised when attempting to link policy compliance to SMEs' performance in the marketplace. As explained in section 1.7, the objective of public procurement policy in Ireland and throughout the EU is to 'create a level playing field' on which firms of all sizes can compete (Department of Finance, 2010; European Commission, 1990, 1992 and 2008c). While legislators envision that a 'level playing field' will precipitate greater SME involvement and success, there is no guarantee that this will actually happen.

5.5.2 Theoretical lens

The institutionally-derived model used in this study accounts for just over 27 per cent of the variance in compliance with SME-friendly procurement policy. This level of predictive power stands up well against figures that have been reported in comparable studies: Gelderman, Ghijsen and Brugman (2006) achieved 12.5 per cent; Flynn and Davis (forthcoming) 16 per cent; Hawkins and Muir (2014) 32 per cent; and Mwakibinga and Buvik (2013) 33 per cent. The significance of the model

notwithstanding, it still means that 73 per cent of the variance is attributable to unspecified factors and relationships inside or outside of the institutional environment. Institutional theory has utility for explaining why public buyers comply with SME-friendly institutional pressures. It is not *the* definitive explanation, though, and should rightly be thought of as one piece in a bigger puzzle. The limits to its predictive power are likely found in its reification of the external environment at the expense of individual power and its all-encompassing attempt at explaining organisational behaviour (David and Bitekine, 2009; Scott, 1987, 2008a). In aiming for breadth it inevitably loses a degree of explanatory depth and precision. Reducing high-level institutional concepts to operational measures is also an on-going challenge for researchers and may account for a certain dissipation of predictive power. These criticisms do not by any means undermine its validity for explaining compliance behaviour, but they do expose some of its constraints.

5.5.3 Research context

Selecting Ireland as the research context was apposite given the avowed commitment of successive Irish governments to better facilitate SMEs in public procurement. Ireland is typical of other EU Member States and OECD countries in its efforts to promote SME growth and competitiveness through public procurement (European Commission, 2011d; OECD, 2013). Moreover, SME-friendly procurement policy in Ireland mirrors that found in other EU Member States. However, as pointed out in recent scholarship on sustainable purchasing, institutional pressures are not invariant across countries and do differ in how they manifest themselves (Hoejmosse, Grosvold and Millington, 2014; Sancha, Longoni, and Gimenez, 2015). The same observation on the specificity of institutional context and the varying power of rules and norms between countries and regions has also been made by leading theorists (Scott et al.,

2000). Neither can it be assumed that institutional pressures are experienced in the same ways by national populations of public buyers. Public administration systems and the governance culture are likely to condition public buyers' responses to them. McMurray et al., (2014) made a similar assertion in drawing attention to the role of religious beliefs as an influence on sustainable purchasing practices in Malaysia. These observations beg the question as to how similar institutional dynamics around SME-friendly procurement in Ireland are to other countries. In the absence of internationally comparable data there is no way of satisfactorily answering this question and so it remains moot. This constitutes another limitation of the study.

5.5.4 Public buyers as research respondents

Public buyers were used as informants in this study. Given that the research objective was to investigate compliance with SME-friendly procurement policy, they were an obvious and justifiable choice. There is also a well-established precedent for using public buyers when researching procurement rule compliance and the adoption of progressive purchasing practices (Karjalainen and van Raaij, 2011; Murray, 2011; Preuss and Walker, 2011). Reliance on public buyers as sole respondents is not without its own drawbacks. In the absence of comparable input from a second respondent cohort – senior organisational managers or SME suppliers, for instance – there is no way of corroborating how faithfully public buyers have reported their habitual behaviours; no way of triangulating the data (Jick, 1979). We must simply take their responses at face value. It also means that the voices of other internal and external procurement stakeholders – end users, SMEs, elected representatives - are excluded. There is, according to Murray (2009b), an over-dependence on public buyers as respondents and a corresponding lack of attention to all other actors. The research design of this study does nothing to redress this imbalance. Lastly, in

surveying any population of public buyers it is inevitable that, in some cases, there will be two or more respondents from large organisations. In an anonymous e-survey there is very little that can be done to detect and control for this occurrence. The effect of organisation context goes unaccounted for here as a result.

5.5.5 Measurement of variables

Accuracy and validity were of paramount importance in designing and executing the primary research component of the study. Alas, how the independent and the dependent variables were measured is not beyond criticism. We will take the independent variables first. The factors identified by Oliver (1991) as germane to predicting institutional compliance, including social legitimacy and economic gain, were operationalised purposely for this study. While the newly operationalised concepts were scrutinised and validated by a panel of reputable international scholars and procurement practitioners, it would have been preferable had pre-tested measures been available. For reasons set out in section 3.14 the same independent variables were operationalised by single-item measures. Multi-item measures are typically recognised as a more statistically robust method of operationalising theoretical concepts. The measurement of policy compliance is also worth commenting on. Like the stance adopted by Hoejmoose, Grosvold and Millington (2013) and Mansi (2015), compliance was treated dichotomously. Not all scholars concur with this stance. Gelderman, Ghijsen and Brugman (2006), for instance, advocated treating compliance in terms of degrees of behaviour. Finally, the differential weighting system used in constructing the compliance index is open to critique. While empirical evidence and expert opinion informed the decision to double weight three measures associated with the barrier of contract size,

acknowledgement must be made that weighting is never an exact science (Booyesen, 2002; Hsu, Johnson and Lloyd, 2013).

5.5.6 Survey research design

The study and its results are not exempt from the limitations inherent to survey-based research design, particularly its 'hard science' take on social investigation (Marsh, 1982; May, 1997). The survey is cross-sectional in form and represents a snapshot of public buyer behaviour at a single point in time; and some four-and-a-half years after SME-friendly procurement policy was first circulated by the Irish government. In this or in any other survey the influence of temporal and/or environmental factors is not picked up on (Schwarz et al., 2008). Typical of any survey (Hakim, 2000), it does not drill down into the deeper meanings that public buyers ascribe to their institutional responses or the contextual complexity surrounding SME-friendly procurement practices. As a result, qualitative insights, illuminating vignettes and a more granular depiction of events are all sacrificed at the expense of measuring, controlling and predicting policy compliance. Additionally, the use of the survey method automatically precludes identifying any SME-friendly practices on the part of public buyers that fall outside the scope of questionnaire instrument. In effect, it confines SME-friendly procurement and its predictors to the *a priori* expectations and theorising of the researcher. There is no space for unanticipated but significant factors, relationships or ways of acting to insinuate themselves into the research findings. There is with inductive research strategy, which is capable of letting the phenomena of interest emerge organically (LeCompte and Goetz, 1982; Lincoln and Guba, 1985; Miles and Huberman, 1984).

5.6 Recommendations for future research

As a result of this study we now have a more evidence-based, theoretically-informed understanding of policy compliance and SME-friendly procurement. Still, more remains to be known and discovered on this topic. In this vein, six recommendations are made to guide future research and to build on the progress that has been made here (see Table 28, pg. 290). These recommendations have been formulated in direct response to the limitations of the study. They are intended not only to refine the predictive model of policy compliance but also to orient researchers towards methodological and theoretical alternatives capable of yielding new insights into SME-friendly procurement and its associated policies. The first recommendation in section 5.6.1 is for researchers to examine the relationship between policy compliance and the number and value of contracts awarded to SMEs. Recommended in section 5.6.2 is the substitution of institutional theory with alternative theoretical lenses, including principal-agent theory and the expectancy theory of motivation. The four remaining recommendations in sections 5.6.3-5.6.6 focus on methodological aspects of inquiry. They advocate taking the following actions: replicating the study in other jurisdictions and conducting comparative research; triangulating public buyers' reported behaviour with other informant or data sources; trialling different measures of institutional pressures and policy compliance; and displaying openness to qualitative research designs.

5.6.1 Policy effects

Policy scholars are interested not only in questions around policy compliance but also around the effects, foreseen or otherwise, of policy initiatives (Beyer, Stevens and Harrison, 1983). Due to the paucity of prior empirical research this study laid its emphasis on the former. Going forward, it is recommended that scholars probe not only policy compliance per se but also the effects of compliance. The focus, in

particular, should be on substantiating if policy compliance acts as a predictor of SMEs' participation and success in public contract competitions. Irrespective of national context SME-friendly policy is designed to address the under-representation of small firms in the public sector marketplace (Anglund, 1999; Beaver and Prince, 2004; Bennett, 2008; Storey, 1994). Empirical evidence is needed to ascertain if SME-friendly policy is helping to correct market failure in public procurement and engender more inclusivity. Proxy measures of policy effects could include the average number of SMEs competing for a typical supply contract, the total number of contracts awarded to SMEs, and the percentage value of annual procurement spend going to SMEs. Admittedly, this is no easy task (see section 3.8.2). Public buyer respondents are unlikely to have such detailed data readily to hand when completing a questionnaire. This could cause them to skip the question altogether or to offer a crude approximation of what they believe the answer to be. Either way the integrity of the results is threatened. Researchers will have to think carefully about how best to obtain reliable and valid measures of these outcomes.

5.6.2 Alternative theoretical perspectives

Institutional theory is one way of looking at compliance with SME-friendly procurement policy. There are other ways and researchers are encouraged to explore them. Possibilities include economic utility theories, public choice theory, psychological theory and socialisation theories (Erridge, 1998; Gelderman, Ghijzen and Brugman, 2006). Two theoretical alternatives are flagged here as having particular promise. The first is principal-agent theory. Concerned with how principals attempt to impose their mandates on subordinate entities (Eisenhardt, 1989a; Jensen and Meckling, 1976), principal-agent theory readily lends itself to any investigation of government-driven efforts for procurement reform. It has been used

to good effect in research on procurement regulatory compliance (Mwakibinga and Buvik, 2013; Soudry, 2007) and on sustainability initiatives in local authority purchasing (Gelderman, Semeijn and Bouma, 2015). It can just as easily be applied to SME-friendly policy. It also enjoys the advantage of being one of the most frequently cited theories in public procurement research (Flynn and Davis, 2014). The second is Vroom's (1964) expectancy theory of motivation, which provides an explanation of workplace motivation. The core postulate is that the motivation to perform a task is a function of the expectation that effort will result in a (valued) outcome. It has possibilities for unfurling public buyers' proclivity to act on SME-friendly policy recommendations. While psychological theory has featured in public procurement research (Maser and Thompson, 2013; Ntayi, Ahiauzu and Eyaa, 2011; Preuss and Walker, 2011), its potential has yet to be fully tapped.

5.6.3 Comparative research

In examining institutional dynamics and their effects on policy compliance Ireland acted as the research context. To advance knowledge on SME-friendly procurement comparable investigations should be carried out in other EU Member States. If circumstances permit, researchers should simultaneously survey public buyer populations across two or more countries. By doing so international comparisons can be made between the institutional drivers of SME-friendly policy compliance. For example, is institutional rule consistency a significant predictor of policy compliance in all national contexts? Likewise, does the perceived constraining effect of SME-friendly policy on professional discretion militate against compliance in all national contexts? There is an impressive comparative body of literature on the barriers that SMEs experience when competing in the public sector marketplace, encompassing findings from the US (MacManus, 1991), Australia (Purchase, Goh and Dooley,

2009), the EU (GHK and Technopolis 2007; GHK, 2010), the UK (Loader, 2005; Ringwald et al., 2009), Northern Ireland (Erridge, Fee and McIlroy, 1999) and Ireland (Bovis, 1996; Greer, 1999). It points to commonalities in barriers that transcend national context. The same level of engagement needs to take place with the factors that promote or impede the realisation of SME-friendly procurement policy. The ubiquity of e-procurement systems makes this more viable than at any time previous, and, as artfully demonstrated in this study, can be exploited for the purposes of fast, economical and effective surveying of national public buyer populations.

5.6.4 Cross-validating responses

Getting public buyers to self-report their behaviours is among the most common and accepted strategies for gathering data in public procurement research. One caveat of this approach is that some buyers may engage in a form of impression management in formulating their responses, particularly if questions pertain to compliance behaviour. Best practice questionnaire design, as followed in this study, can help to counter this threat to validity (Fowler, 1995). To reduce the threat still further the recommendation here is for future studies to cross-validate or triangulate data obtained from public buyers with second informants (Jick, 1979). Possibilities in this regard include senior managers and end-service users within public sector organisations. The same advice is proffered by Gelderman, Ghijssen and Brugman (2006) and Hasselbalch, Costa and Blecken (2015). Alternatively, validation of SME-friendly policy compliance on the part of individual buyers could be sought by analysing their historical tender documentation - an unobtrusive strategy ideally suited to sensitive research projects (Garavan and MacKenzie, 2015). Researchers do need to be mindful of the additional resource demands and access hurdles that come

with cross-validation attempts. Away from public sector perspectives consideration could be given to investigating policy from the vantage point of its intended beneficiaries – SMEs. Their experiences are another valid means of evaluating policy compliance and its impacts. Early indications are that SMEs are negative in their assessments (Flynn and Davis, 2015b). Even more interesting would be to simultaneously survey public buyers and small suppliers on the translation of SME-friendly policy into practice and then compare the results.

5.6.5 Parsimonious modelling

The model of policy compliance devised in this study contains no less than eight institutional factors. Breadth over depth is an advisable strategy when there is little in the way of empirical precedent to go on. But having verified the explanatory power of institutional theory in relation to SME-friendly procurement, researchers may wish to proceed with a more refined model with fewer variables. As one example, recourse could be made to coercive, normative and mimetic institutional pressures to predict compliance behaviour. These three institutional factors have already been operationalised, tested and validated across a variety of contexts, ranging from information technology adoption (Teo, Wei and Benbasat, 2003) to sustainable and environmentally-friendly supply chain practices (Sancha, Longoni and Gimenez, 2015; Zhu, Sarkis, and Lai, 2013). Comparisons could even be made between the eight-factor institutional model used here and the three-factor institutional model in terms of their respective abilities to predict compliance. Future studies may also wish to re-visit the treatment of policy compliance. The preferred stance in this study was to capture SME-friendly procurement policy in its totality. This produced a 19-item index. Conceivably, fewer items could be used to construct the index while still

embodying the essence of SME-friendly procurement. If significantly fewer items are used, then measuring compliance on a Likert scale becomes practicable.

5.6.6 Qualitative research design

The preceding five recommendations entail various refinements or extensions to the predictive model used in this study. The sixth and final recommendation represents something different altogether. Rather than measuring and predicting compliance with SME-friendly procurement, researchers might wish to consider qualitative research designs. Inter alia, this could involve exploring the meanings that public buyers attach to their SME-friendly procurement behaviour; empathising with the decisions they make; and situating SME-friendly procurement in its wider organisational and social milieu. In practical design terms this requires direct engagement with research subjects through interviewing, document gathering and workplace observation over a sustained period of time so as to produce in-depth case descriptions (Eisehardt, 1989b). Several such in-depth cases of SME facilitation by public buyers already exist in the literature, which can be used as a compass to guide future investigations into policy compliance (Cabras, 2011; Erridge, 2007; Loader, 2007, 2010, 2011; McKevitt, Flynn and Davis, 2014; Walker and Brammer, 2009). Qualitative research should not be thought of as antagonistic to survey design, but as complementary to it. It offers the prospect of more fine-grained analyses of what public buyers are doing and why they are doing it. These insights can then be used to inform model building and theory testing. They can also be interleaved with existing survey findings to produce more holistic accounts of SME-friendly procurement in the public sector.

Table 28 Summary of limitations and future recommendations

Dimension	Limitation	Recommended action
Research focus	The relationship between policy compliance and SMEs' participation and success in contract competitions is not examined	<p>Measure outcome variables for SMEs (as reported on by public buyers): (i) number of SMEs tendering for contracts (ii) number of contracts awarded to SMEs (iii) percentage value of annual procurement spend awarded to SMEs</p> <p>Test policy compliance as a predictor of the above variables</p>
Theoretical perspective	The institutionally-derived model accounts for 27 per cent of the variance in policy compliance, meaning that the majority of variance is beyond its explanatory power	<p>Take an alternative theoretical lens – principal-agent relationships, expectancy theory of motivation – to explain and predict policy compliance. Compare its predictive power against institutional theory's</p> <p>Use institutional theory in conjunction with a second theoretical lens; preferably one that focuses on internal drivers of policy compliance</p>
Methodology (comparative research)	While there are strong institutional commonalities in public procurement regimes across EU Member States, it is moot as to whether the institutional dynamics captured in this study are the same in other national contexts. Conceivably, public buyers elsewhere react differently to SME-friendly policy pressures	Replicate the study in another EU Member State and/or simultaneously survey public buyer populations in two or more EU Member States using the same or a similar predictive model to that used in this study and compare the findings
Methodology (cross-validation)	The study relies on public buyers' self-reported policy compliance behaviours	Cross-validate data obtained from public buyers with input from other organisational actors such as senior managers. Alternatively, source objective measures of public buyers' compliance behaviour by, for example, analysing historical tender documentation

	Policy compliance is not investigated from the perspective of small firms – who are the intended beneficiaries of SME-friendly procurement policy	Survey a population of SMEs active in public procurement to ascertain the extent to which they are experiencing policy implementation
Methodology (modelling and measuring)	<p>The predictive model of policy compliance emphasises breadth over depth</p> <p>Policy compliance is understood in binary terms. It does not allow for the possibility that compliance might be something of degree rather than either/or</p>	<p>Consider reducing the number of institutional factors in the predictive model from eight down to three - coercive, normative and mimetic pressures – and operationalise them using multi-item measures</p> <p>Consider reducing the number of measures comprising the compliance index (dependent variable) and then measure them on a 1-5 Likert scale</p>
Methodology (research design)	<p>The survey research design privileges measurement and prediction over meaning and empathising. Specifically:</p> <p>The findings give a snapshot of policy compliance at a particular point in time</p> <p>The meaning that public buyers attach to their behaviours is not probed; nor is the context in which their procurement decisions are made</p> <p>SME-friendly actions by public buyers that fall outside official policy recommendations are not detected</p>	<p>Use alternative to survey research design. Specifically:</p> <p>Employ a longitudinal, case-based research design in order to examine policy compliance over a longer time period e.g. 12+ months</p> <p>Use qualitative forms of research engagement, including semi-structured interviews and workplace observation, to produce ‘thick descriptions’ that are context specific</p> <p>Use qualitative research designs - as above</p>

5.7 Conclusion

Government policies to promote SME involvement in the public sector marketplace are now standard across developed economies (OECD, 2013). The advent of SME-friendly procurement policies in the public sector has, in turn, stimulated debate among scholars as to their desirability, utility and likely impact (Kidaloav and Snider, 2011; Loader, 2013; Nicholas and Fruhmman, 2014; Preuss, 2011). What has been missing from the debate up to this point is evidence on compliance with these same policies. Whether this has been due to misapprehensions around policy automatically translating into practice, ambiguous policy objectives or more prosaic issues to do with securing access is debatable. The effect, in any case, has been to leave SME-friendly procurement without a strong evidential foundation or theoretical framing – neither of which is satisfactory from a research perspective. This study represents an attempt to move beyond this point; beyond the political rhetoric of SME-friendly procurement and towards its everyday reality (Flynn and Davis, 2015b). It ranks as among the first accounts of how public buyers are responding to SME-friendly policy and the institutional factors conditioning their responses. While it does not claim to have all the answers to questions on this topic, it does constitute a substantial and original contribution to the public procurement field. To bring this study to a conclusion its three main findings will now be recapitulated.

Firstly, public buyers are complying with SME-friendly policy to a moderate extent. Their behaviour, on average, is analogous to taking a compromise approach to institutional compliance (Oliver, 1991) or engaging in a form of administrative satisficing (Van de Ven, 1983). We can infer from their reported behaviours that some progress is being made towards enabling greater levels of SME participation in

public contract competitions. By the same token, there is an undeniable gap between what is espoused by elected representatives versus what is happening in practice. A more micro analysis shows that public buyers are more able and/or willing to put some policy measures into practice than others. This a la carte approach to policy implementation implies that some barriers to SME participation will dissipate while others will persist. Progress towards a more SME-friendly tendering system is likely to be uneven and disjointed as a result. It is a truism that public policy does not seamlessly or automatically translate into practice (Lipsky, 1980). Public procurement policies are no exception to this rule based on the results presented here. In the final analysis, SME-friendly procurement is easier said than done; a conclusion that finds resonance in the wider literature on SMEs (Bennett, 2008; Storey, 2003). Scholars and policy makers alike would do well to remember this proviso when discussing and proposing solutions to the longstanding problem of SMEs' under-representation as suppliers to public sector organisations.

Secondly, forces within the institutional environment are significant in determining public buyers' compliance with SME-friendly policy. This is in line with theoretical predictions on the role of the institutional environment in shaping behaviour within public sector organisations (Di Maggio and Powell, 1983; Meyer and Rowan, 1977; Oliver, 1991; Scott, 2008b; Zucker, 1977, 1987). The institutional factors that matter are rule consistency in public procurement, compatibility between SME-friendly policy and organisation procurement goals, organisational dependence on the state, and the constraining effects of SME-friendly policy on professional discretion. The first of these three factors promote policy compliance. The fourth inhibits it. The findings lend credence to the view held by many procurement scholars that a multiplicity of goals and policies in public procurement, as well as tensions and

conflicts between political aspirations and organisational realities, has a major bearing on whether SME-friendly procurement takes effect or not (Bovis, 1998; Erridge, 2007; Fee, 2002; Loader, 2007; Schapper, Veiga Malta and Gilbert, 2006). The institutional factors that do not directly affect compliance are social legitimacy, economic gain and the coercive and mimetic control mechanisms at play in the field. Moderated by procurement experience, procurement involvement and organisation size these same factors, excepting economic gain, do affect policy compliance. The observed interactive effects provide a glimpse of the complex and multi-layered nature of institutional dynamics in public procurement.

Thirdly, individual and organisational characteristics matter in any explanation of policy compliance in a public procurement context. Previous scholarship has alighted on the characteristics of public buyers and their organisations that are germane to explaining procurement rule compliance (De Boer and Telgen, 1998; Karjalainen and von Raaij, 2011; McCue and Gianakis, 2001; Sang and Mugambi, 2014). The results presented here add to and even extend what is already known. They confirm that individuals for whom procurement constitutes a major part of their occupational role exhibit higher levels of compliance with SME-friendly policy. The same is true of public buyers who hold a recognised qualification in procurement or a cognate area. As expected, familiarity with SME-friendly policy content is a prerequisite for individuals subsequently acting on it in practice. At organisational level centralising procurement operations is conducive to the SME-friendly policy translation. The maturity of the procurement function and its status in the organisational hierarchy is also associated with higher levels of policy compliance. Empirical confirmation of the role these characteristics play is not only valuable for future research and model testing in public procurement. It also serves to remind

elected representatives and senior public administrators on the need to professionalise public purchasing in the interests of successful policy implementation.

Writing over a decade ago Thai (2001) expressed his frustration at academic indifference towards public procurement. In the intervening decade and a half scholars have worked assiduously to rectify this situation. Thanks to their efforts the profile of public procurement is now higher than at any time previously and the field boasts an international and fast growing community of interest. This study plays its part in extending the boundaries of public procurement by shining the spotlight on the much discussed but little researched SME-friendly policies. The results of the study mark the beginning rather than the end of a conversation involving both researchers and practitioners on what happens when governments attempt to institutionalise SME-friendly procurement. For example, it remains to be seen whether policy compliance delivers the outcomes for SMEs that elected representatives desire, namely: their increased participation and success in contract competitions. Questions such as these are not purely of academic interest. Policy in the domain of procurement has ramifications for effective public administration, public sector accountability, public finances, SME growth and even national economic competitiveness. In other words, they should not be taken lightly but instead deserve our sustained commitment and engagement. As researchers this is our challenge and our tremendous opportunity going forward.

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Appendix

Appendix A

Flynn, A & Davis, P (2014). Theory in public procurement research. *Journal of Public Procurement*. Vol. 14 (2): 139-180

THEORY IN PUBLIC PROCUREMENT RESEARCH

Anthony Flynn and Paul Davis*

ABSTRACT. This paper examines the role of theory in public procurement research. Theoretical rigour is integral to management science, yet little is known on the extent and form of theory in public procurement. With the field starting to mature, addressing this issue is timely. From conducting a systematic literature review we find that 29 percent of articles are theoretically grounded, with the incidence of theory having increased in recent years. Economic, sociological, psychological, and management theories are all in evidence, but micro-economic theories predominate. Our findings also show that survey reporting and case studies account for almost half of all studies; procurement research is focused on organizational-level aspects more than regulatory-policy issues or public buyers; and studies to date have largely emanated from the North American and European regions. The contribution of this paper lies in clarifying the theoretical underpinnings of public procurement. Out of this we highlight the need for greater theoretical rigour, point to the under-use and even absence of theories that could have high validity and utility, and suggest a narrowing of research foci.

INTRODUCTION

Writing over a decade ago Thai (2001) drew attention to the academic neglect of public procurement. In spite of its centrality to public service delivery and its long history in public administration, public procurement resided on the periphery of management science. In the years since much has happened to redress this imbalance so that public procurement has moved closer to the mainstream. Its research remit continues to expand as scholars of management, public administration, finance, law, supply chain and logistics management, mathematics, and information technology apply themselves to the study of public procurement. In turn, this has opened up promising lines of inquiry on topics as diverse as e-procurement (Lee, 2010; McCue & Roman, 2012; Schapper et al., 2006), small suppliers (Flynn et al., 2014; Qiao et al., 2009; Withey, 2011), and buyer professionalization (McCue & Gianakis, 2001; McKevitt et al., 2012; Prier et al., 2010). The progression of the public procurement field is just as evident outside academia. In political and policy arenas public procurement is now linked to concerns over economic growth, social inclusion, and environmental sustainability (Arrowsmith, 2010; McCrudden, 2007). In particular, pressures on public finances since the 2007 global financial crisis have forced a reappraisal of the role of public procurement, with

some arguing that it should be leveraged for domestic economic growth and job creation (Murray, 2009). Whatever perspective one takes, it is clear that the profile of public procurement is greater than at any time previously.

Central to the upward trajectory of public procurement has been two-way communication between research and practice. While there has been a regrettable trend in many disciplines to divorce themselves from the everyday concerns of business practitioners and privilege theoretical and methodological rigour over all else (Hambrick, 2007; Gunther McGrath, 2007), public procurement has made a virtue out of constructively engaging with practitioners and addressing their interests. Contemporary studies attest to an emergent nexus between academic research and issues of direct organizational and professional concern. Among recent examples of such practitioner-focused inquiry include a framework to support buyers in managing the challenges associated with e-procurement adoption and implementation (Roman, 2013), a model for quantifying the organizational benefits of migrating to e-procurement (Gardenal, 2013), and a tool for assessing the contribution that buyers make during the procurement of consultancy services (Schiele, 2005). Procurement professionals are also making an impact. Their insights on topics ranging from environmental impact assessments (Van Valkenburg & Nagelkerke, 2006) to procurement strategies in post-disaster situations (Atkinson & Sapat, 2012) are helping to disseminate best practice, stimulate debate, and inform scholarship. This intersection of research and practice is creating a solid platform on which public procurement can develop into the future.

Notwithstanding the undoubted progress that has been made in fostering a community of interest in public procurement research (Grimm & Thai, 2011), there are still areas that have yet to be fully addressed. In particular, the role of theory in public procurement research is deserving of greater attention. While it is clear that practitioner concerns have featured prominently, it is less clear as to what role theory has played in advancing our knowledge of purchasing in public sector contexts. This raises important questions over just how rigorous is public procurement research. Having answers to these questions is necessary if we are to make informed assessments of how far we have come and how far we still have to go to establish public procurement as a credible management sub-field. Where scholars have engaged with the question of theory, the recommendation is that we need more of it. In their discussion of public procurement policy Snider & Rendon (2008, p. 311) were

minded to say that “....scholars have yet to give sufficient efforts to the sort of conceptual theorising about policy that will lead to ordering devices and approaches that can help researchers and students make sense of its complexity, uses and limitations.” Previous to this, Snider (2006) hinted at a tendency towards introspection in contemporary public procurement research and a failure to relate it to more overarching theoretical perspectives. Other contributors have also averred to the desirability of using theoretical lenses, as when McCue & Prier (2008, p. 2) called for more theory if “one wants to explain, predict, and understand behavior concerning the intent, purpose, and actual use of cooperatives in procurement.” Thus, while the role of theory has not been interrogated in any systematic fashion up to this point, there is reason to believe that practitioner relevance has taken precedence over theoretical rigour.

When deliberating on the role of theory in public procurement research, there are a number of factors worth bearing in mind. Firstly, the entry of public procurement into the academic ranks is a relatively recent occurrence (Matthews, 2005). The fact that public procurement was still spoken of by Prier et al., (2010) in terms of the “birth of profession” as recently as 2010 is further indication of its newness. Secondly, public procurement is said to suffer from definitional ambiguity and porous field boundaries, making the application of theory problematic in comparison to mature fields that operate within strict parameters (Prier & McCue, 2009). These caveats aside, we believe that an examination of the role of theory in public procurement research is warranted. It is our contention that public procurement is fast reaching the point at which diligent and judicious application of theory is required if momentum is to be maintained. Importantly, theoretical rigour need not come at the expense of practitioner relevance. If anything, the effect of more emphasis on theory is likely to be salutary. Dimitri (2013, p. 152) captured this sentiment best in stating that “...daily procurement design can benefit from the more robust theoretical findings, while practice can fruitfully feed academic research with new problems, suggestions and intuitions.” In this way the application of existing theories to current practitioner challenges has the potential to generate new insights and possible solutions to these same challenges, while research endeavor can generate the data for developing new concepts, models and even field-specific theories.

The purpose of this article is to examine the role that theory has played in public procurement research. In particular, it aims to answer the following research questions.

RQ1: What percentage of public procurement research is theoretically grounded?

RQ2: What are the main theories used in public procurement research?

Related to the theoretical underpinnings of any field are questions to do with its coherency and its trajectory. This led us to pose three additional research questions.

RQ3: What type of papers characterise public procurement research?

RQ4: What are the main research foci in public procurement?

RQ5: What geographical regions is public procurement research associated with?

To answer the five research questions we conducted a systematic review of articles published in the *Journal of Public Procurement*. This was done in order “...to map and to assess the existing intellectual territory” (Tranfield et al., 2003, p. 208). The review covered a 13 year time period and took in 172 articles, after exclusions were made. Our findings have important implications for public procurement scholarship, and are set out in greater detail in a later section. Before this, we examine the role of theory in management science. We then describe our methodology, paying particular attention to coding issues. The findings of the review are then reported, including the extent and form of theory in public procurement research, the type of papers that characterise public procurement research, the focus of public procurement research, and the geographic regions from which it emanates. In the last section we discuss the implications of our findings in respect of the emergence of public procurement as a research domain, as well as its future prospects.

THEORY IN MANAGEMENT

Theory is central to the scholarly credentials of any discipline. Within the public procurement field little is known of the role that theory has played to date. This situation stands in contrast to the related field of supply chain management wherein theory is widely debated (Ketchen & Hult, 2011, for example). Moreover, supply chain management has been subject to a number of systematic literature reviews of late, including Harland et al., (2006), Defee et al., (2010) and Chicksand et al., (2012). Coming out of these three reviews are insights, though not always consistent, on the extent to which theory

is used and the form that it takes. Harland et al., (2006) detected some signs of theoretical development in supply management; Defee et al., (2010) suggested the need for more theory and noted the desirability of constructing theory particular to supply chain and logistics management; and Chicksand et al., (2012) concluded that supply chain management is relatively under theorised, lacking in disciplinary coherence and still waiting for a dominant paradigm to emerge. Comparable evidence on the extent and form of theory use in public procurement is currently lacking. This is a gap that needs addressing, both to inform future research trajectories and to build on gains that have been made in the public procurement field over the last ten years (Grimm & Thai, 2011). Before doing so, we first make the case for why theory is integral to social scientific research, examine what is meant by theory, and critique the ascendancy of theory within management science.

Theory has undoubtedly assumed greater prominence as management science has matured, largely in consequence of decisions taken over fifty years ago to strengthen its scientific underpinnings (Bailey & Ford, 1996). Reviews of premier management journals have shown that the number of articles making a theoretical contribution, either through theory testing or theory building, increased steadily between 1963 and 2007 (Colquitt & Zapata-Phelan, 2007). Management-specific theories have proliferated over this same period and are now used alongside the more established psychological and economic theories for studying organizations and markets (Agarwal & Hoetker, 2007). These developments reflect a near universal consensus over the criticality of theory in management research. As researchers, theory enables us to organise our thoughts and knowledge, formalise our predictions, generate coherent explanations of real world phenomena, develop hypotheses, and integrate knowledge (Hambrick, 2007; Miller, 2007). That is, theory provides us with logical structures for explaining and predicting individual and social phenomena. It is how we make sense of, disaggregate, and rationalise the complex phenomena we are interested in revealing. Ultimately, theory leads us to a more comprehensive understanding of our phenomena of interest than would ever be possible in its absence.

In addition to strengthening the scientific foundations of management, theory has a contribution to make to organizational practice and management. In the ideal sense theories should have an acceptable degree of validity, by which is meant enabling understanding and prediction, and a corresponding degree of utility

for practitioners (Miner, 1984). As Van de Ven (1989, p. 486) remarked, good theory not only “advances knowledge in a scientific discipline” but also “guides research toward crucial questions, and enlightens the profession of management.” To the extent that they are based on empirical regularities, theories help managers to better understand their present circumstances and make predictions as to the outcome of likely future events (Christensen & Raynor, 2003; McGahan, 2007). Knowledge generated through academic investigations can be transformed into decision making tools for dealing with real world business problems. Pioneers in the field of management research envisaged the role of theory in just this way. Herbert Simon (1967) outlined several decades ago his belief that the success of business research and education depended on its ability to synthesise knowledge from scientific conceptions of management with insights from the real world of organization management. Put simply, theory fosters understanding not only in the academic realm but also in the everyday management of organizations.

The prominence of theory in management research has brought its own challenges, however, and uneasiness exists over what purpose and whose interest it now serves. A number of scholars have expressed concern with the privileging of theoretical sophistication over practical relevance. Hambrick (2007, p. 1351) criticised a “hyper-commitment to theory” within management research which stymies the emergence of interesting facts; Ghoshal (2005) opined that teaching, practice and knowledge integration have all suffered because of a fixation on scientism; and Gunther McGrath (2007) spoke of an identity crisis within management research that has resulted from subordinating practical relevance to theoretical purity. This “hyper-commitment to theory” is viewed by some as an impediment to progress. It led Miller (2007, p. 179) to complain of interesting and novel empirical findings being straitjacketed with a particular theory, linked to meretricious explanation, or couched dishonestly in explanations that were formulated post hoc. In a similar vein Tushman & O'Reilly (2007, p. 770) have argued that “self-imposed distance from the phenomena we study reduces the quality of our field’s research, undermines the external validity of our theories, and reduces the overall relevance of the data used to test theories.” In the eyes of many, we now have “too much of a good thing” when it comes to theory in management research (Hambrick, 2007, p. 1346) and have jettisoned “pragmatic science” in favour of “pedantic science” (Anderson et al., 2001).

A second major issue surrounding theory in management is its definition. An anomalous situation exists where consensus on the importance of theory is not matched by agreement on what we understand theory to be, or how it ought to be used. According to DiMaggio (1995), theory is variously understood as a set of covering laws that explain and predict social phenomena, as a detailed and plausible account of a social process, or as a form of enlightenment. While some scholars and schools of thought define theory by its ability to explain variance in a criterion of interest, others see theory in terms of detailed narratives and accounts (Colquitt & Zapata-Phelan, 2007). These different understandings of theory are not mutually exclusive, and many of the best theories incorporate elements from all three perspectives (DiMaggio, 1995). Irrespective of its precise definition, Whetten (1989) proposed that any theory contains four essential elements. Firstly, a theory must have variables, constructs, or concepts that explain the social phenomena of interest. Secondly, it must specify how these variables, constructs, or concepts are related to one another. After this, there must be a rationale associated with the selection of factors and their causal relationships. Finally, all theories should have contextual and temporal boundaries that set the limits of generalizability for its use. We can relate Whetten's (1989) disaggregation of the fundamental components of theory to our earlier articulation of it being a robust system capable of explaining and predicting individual and social phenomena.

Inverting what Whetten (1989) had to say on the constitution of a theory, Sutton & Staw (1995) reasoned that if agreement on a standard definition of theory is proving illusive, we can at least be clear on what theory is not. In their estimation references, data, variables, diagrams or hypotheses do not qualify as theory. Among their criticisms, they noted the all too frequent tendency of simply referencing an existing theory without any attempt to set out its causal logic, describing empirical regularities without proper explanation as to why they are occurring, listing concepts without justifying their causal connections, and creating diagrams without explicating the mechanisms believed to be at play. While concurring with Sutton & Staw's (1995) basic argument, Weick (1995) urged caution over what we discount as theory. For him theory is not just a finished product. It is equally a process, a work in progress. He reasoned that even if references, data, variables, diagrams and hypotheses are not theoretical of themselves, they are integral to the process of theory construction. In reporting data patterns, listing

variables or constructing diagrams – all activities that form part of the “interim struggle” of theory development - Weick (1995) surmised that researchers are oftentimes making their way towards some form of theoretical contribution, albeit tentatively and imperfectly. Evidently, discussion on the role of theory in management research raises as many questions as it answers. Different interpretations over what theory is and what purpose it should serve persist, with some schools of thought adhering to a standard scientific view and others preferring something bespoke to the social sciences. What is more, achieving consensus on these issues appears a long way off.

The issues raised in the preceding paragraphs are just as germane to public procurement. Like management generally, greater theoretical application can enable more scientific explanations of public sector purchasing (McCue & Prier, 2008; Snider & Rendon, 2008). The judicious use of theory can help to foster mutually reinforcing ties between academia and practitioners, thereby enhancing the utility of research outputs (Dimitri, 2013). At the same time, public procurement cannot escape many of the challenges associated with theory in management science. The diversity of the public procurement field, while beneficial in supporting the cross-pollination of ideas and perspectives, leaves it vulnerable to becoming too diffuse through the use of multiple theories, methodologies, and research foci. Pfeffer (1993) highlighted this very problem in relation to management research generally. How exactly do we “...embark on a more truly synergistic research enterprise, one in which we might perform work that is rigorous and relevance at once” (Gulati, 2007, p. 778) is also a challenge for public procurement researchers. Given that the pendulum in management science is said to have swung from too little theory to “compulsive and mindless theorizing” (Hirschman, 1970, p. 329), this is no easy undertaking. It requires, as Aram & Salipante (2003, p. 189) have stated, a “reasoned relationship between the particular and the general.” The next section describes the methodology used to examine the role of theory in public procurement research. Our primary objective was to determine the extent of theory use (RQ1) and what theories are used (RQ2). In addition, the type of papers that characterise public procurement research (RQ3), its main research foci (RQ4), and the geographic regions with which it is associated (RQ5) were also subject to investigation.

METHODOLOGY

To answer the five research questions we conducted a systematic review of public procurement research. Our approach was informed by best practice guidance offered by Tranfield et al., (2003) for planning, conducting, and reporting on a literature review. This covers such aspects as the development of a review protocol, considerations for the identification of research, and methods for the synthesis of data. In searching the field we limited our review to the *Journal of Public Procurement*. Reliance on one journal has its limitations. Principally, our approach meant that public procurement research published elsewhere is excluded from our analysis. Our reliance on one journal can be contrasted with three journals selected by Chicksand et al., (2012) and five journals selected by Defee et al., (2010) in their respective reviews of supply chain management. Against this, the *Journal of Public Procurement* is the only scholarly journal dedicated to public procurement research [1]. By comparison, there are a number of scholarly journals dedicated to supply chain management. Furthermore, the *Journal of Public Procurement* has established itself as the primary outlet for researchers interested in public sector purchasing and has become the centre of debate on myriad issues in the public procurement domain.

Our experience led us to believe that scholarship on public procurement is concentrated within the *Journal of Public Procurement* and that the quantity of articles appearing elsewhere is not substantial to the degree that it would significantly affect our findings. As such, we felt justified in limiting our review to the *Journal of Public Procurement* as it represents a reliable and comprehensive gauge of what has been researched over the last decade. We also noted that reviews based on the content of a single journal have been previously undertaken. For example, Taylor & Taylor (2009) performed a thematic analysis of operations management research using only the *International Journal of Operations and Production Management*. Our sample timeframe starts in 2001, the year in which the *Journal of Public Procurement* was launched, and ends in 2013 [2]. It takes in 13 years of public procurement research, encompassing the time period both before and after the global financial crisis of 2007. As is standard with literature reviews, we excluded editorials and president letters, symposium introductions, practitioner corner articles, U.S government reprints, and book reviews as these were deemed extraneous to the objectives of the research. This left 172 articles which were published in the *Journal of Public Procurement* between 2001 and 2013.

Each of the 172 articles constituted a unit of analysis. A system was employed (Table 1) to ensure that all 172 articles were analyzed in a comprehensive and transparent way, which is a hallmark of the systematic review procedure (Tranfield et al., 2003). To begin with, descriptive details for each paper were recorded. These included year of publication, volume number, article title, and author details. Each article was then tested against pre-specified criteria, discussed further on, to determine if it was theoretically grounded. Articles were coded zero if they were adjudged theoretical and one if non-theoretical. Where applicable, the actual theory employed was also recorded. A list of major theories was devised in advance of the coding process to allow easier identification, coding and categorisation of theoretical articles. This list, reproduced in Table 3, was compiled based on the authors' pre-existing knowledge of the field and from skimming a sample of papers from each publication year.

Table 1
System for Reviewing Articles

Title	Theoretical	Theory Code	Theory Group	Type of Paper	Level of Analysis	Region
Dispelling fear...	Yes	All Other	Psychology	Conceptual	Organizational	US
Design and build	No	n/a	n/a	Survey	Organizational	Europe
Public policy...	No	n/a	n/a	Survey	Organizational	US
An appraisal...	Yes	Institutional	Sociology	Survey	Macro	Africa
Best value....	No	n/a	n/a	Technical	Organizational	n/a
Unwritten ground...	Yes	Principal-Agent	Economics	Case study	Macro	Asia
A model...	No	n/a	n/a	Survey	Organizational	Europe
An empirical...	Yes	Principal Agent	Economics	Survey	Macro	Africa

As well as investigating theoretical content, our review sought to determine paper type, research focus, and geographic origin. Previous reviews in fields such as operations management have adopted similar lines of inquiry (Taylor & Taylor, 2009, for example). In the case of paper type, a list of seven categories and their definitions was compiled (Table 2). Again, this list was based on the authors' pre-existing knowledge of the field and from skimming

sample papers from each publication year. Each of the 172 articles was coded as conceptual, survey, case study, technical & simulation, policy & literature review, positional, or development of measurement tool. The research focus of each article was recorded verbatim at first. Thereafter, each article was assigned to one of three research categories: characteristics and motivations of public sector buyers; procurement as an organization-level phenomenon; and macro policy and regulatory issues. Finally, where applicable the regional focus of the article was identified and coded as one of: United States & Canada, Europe, Asia & Oceania, Africa, all other regions, and no geographical context.

TABLE 2
Pre-Specified List of Paper Types and their Definitions

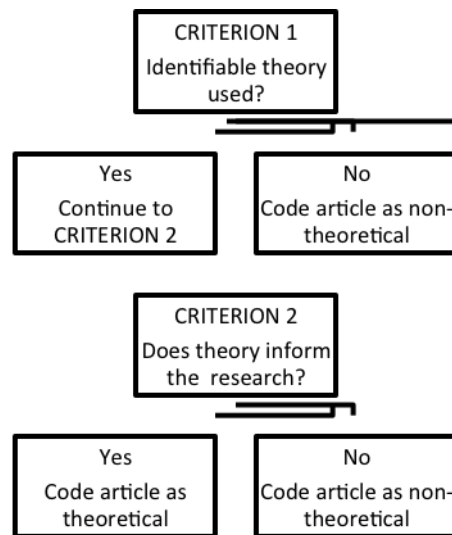
Paper Type	Description	Code
Survey	A paper that is based on the systematic examination of a particular topic and reports on its quantitative findings e.g. a survey of the professional skills and abilities of public sector buyers	1
Case study	A paper that focuses on a particular case or issue, using documentary evidence, interviews, quantitative data in reporting its results e.g. a case study of procurement reform in local authority organizations	2
Conceptual	A paper that focuses on concept development and/or makes a theoretical contribution (non-empirical)	3
Development of measurement tool	A paper that describes the development/application of a measurement tool in respect of an aspect of procurement e.g. an instrument that measures the impact of e-procurement on compliance with purchasing policies	4
Positional	A paper that offers an opinion on a particular issue or topic e.g. the pros and cons of set-asides for small and medium-sized enterprises (SMEs)	5
Policy & literature review	A paper that reviews a policy area associated with public procurement or that reviews literature relevant to a certain topic e.g. the growing use of environmental criteria in the selection of suppliers	6
Technical & simulation	A paper that deals with a technical problem or challenge e.g. optimising weighting criteria for tender evaluations/ A paper that simulates or mathematically models certain scenarios e.g. the effect of bundling contracts on bid prices	7

To test if an article was theoretical two criteria were applied (Figure 1). The first criterion stated that the article must include something approximating to the standard definition of theory, namely: a structure capable of explaining and predicting individual and social phenomena (Colquitt & Zapata-Phelan, 2007; Hambrick, 2007). For example, institutional theory explains how organizations come to resemble one another in their structural and behavioural characteristics by reference to the impact of institutional forces, and predicts the conditions under which this is more or less likely to happen (Meyer & Rowan, 1977; Meyer & Scott, 1983). Absent of having such a systemised structure capable of explaining and predicting individual and social phenomena, the article was not judged theoretical. While this point may seem obvious, it is nonetheless important as the conflation of concepts, frameworks, hypotheses, data and references with theory is a common mistake made by researchers (Sutton & Staw, 1995). An alternative approach would have been to count the number of times “theory” appears in the text body of the article, or if “theory” features in a section heading (Hambrick, 2007). For the former, the frequency of mentions could be taken as indicating if the article is theoretical in substance, with perhaps a minimum frequency threshold used to separate theoretical from non-theoretical articles. The presence of theory in a section heading is also suggestive of a theoretical article. However, as we show below, it is no guarantee that an article is theoretical in substance.

The second criterion stipulated that where a theory is specified within an article it must be used to frame the research. It is not sufficient for an article to superficially employ a particular theory, thereby purporting to be more scientific than it actually is. The use of this second criterion allowed for the exclusion of any article that only pays cursory reference to a theory or simply name-checks a theoretician. Hence, in the interests of producing a reliable indicator of theory in public procurement research there had to be a demonstrable link between the logic of a cited theory and the research content of the article. No definitive rule exists for making such a determination and the depth and sophistication of application can be expected to vary across published research. In addition, differences in theoretical application are to be expected on the basis that some articles will use theory to deduce hypotheses for empirical testing while others will seek to build on, or revise, a particular theory. But either way, the theory or theories that appeared in the article had to be used in a substantive way for it to be judged theoretical. A good

example of theoretical application is found in Thai (2001). He used general systems theory to explain how policy and regulatory forces impact procurement practices across the public sector and how these same practices, in turn, act back on political and policy calculations, resulting in a system defined by interaction and inter-dependence.

FIGURE 1
System for Coding Articles as Theoretical



Our chosen methodological approach had both advantages and disadvantages. It was not as objective, transparent or systematized as mechanically searching for “theory” in the text body or section headings of articles. Against this, we did proceed with a clear definition of theory and consistently applied this definition in testing whether a particular article was theoretical or not. Our approach also required two reviewers to scrutinise each of the 172 articles and to make their categorizations on this basis. This ensured that a reliable determination was made on the presence or absence of theory, and if this same theory had been applied to a satisfactory degree. An example is useful in demonstrating why our methodological approach proved more effective than mechanical content analysis. Among the reviewed articles was an investigation of “design and build” procurement strategies by Lesniak & Zima (2013). As part of their literature review, Lesniak & Zima included a section headed “theoretical background”. However, closer inspection revealed that

this section contained no theory. Had our approach solely relied on detecting the presence of “theory” or “theoretical” in section headings, Lesniak & Zima’s article, and others besides, would have been incorrectly recorded as theoretical.

The coding process proceeded in two stages. In the first stage each article was examined by two reviewers working independently of one another. Tranfield et al., (2003, p. 217) referred to this as the process of “double extraction”. Using two reviewers is a recommended strategy for improving the quality of qualitative research and helps to underpin the reliability of the review and its findings (Seale, 2000). Upon completion of the first stage the results of each reviewer were cross-compared. In over 90 percent of cases the reviewers independently arrived at the same determination on the presence of theory and the particular theory in question. The classification of paper type, research focus and geographic region resulted in few discrepancies as it involved coding according to a pre-specified list in the case of paper type and coding verbatim in the case of both research focus and geographic region.

In the second stage the two reviewers worked together and dealt with the small number of articles over which there were initial differences in coding decisions or where some element of uncertainty existed. In the former instance this involved deciding whether an article had met the two qualifying criteria for it to be judged theoretical. In other words, was there an identifiable theory and did the same theory frame the research study. In the latter instance it required identifying theories where they were not made explicit, a difficulty which Defee et al., (2010) also experienced. For example, Ntayi et al., (2011) described, explained and modelled the relationship between psychological wellness and organizational anomie to ethical procurement behaviour. Out of this we inferred self-determination theory, a meta-theory for framing motivational studies, even though Ntayi et al., (2011) did not explicitly refer to this theory. Similarly, Hommen & Rolfstam’s (2009) invocation of interactive learning and evolutionary perspectives on innovation processes led us to the conclusion that innovation theory was being used. Our two-stage approach resulted in the coding of 172 articles along a number of dimensions and the generation of a large dataset. Thereafter, a synthesis of the data was undertaken. The results from this are described in the next section.

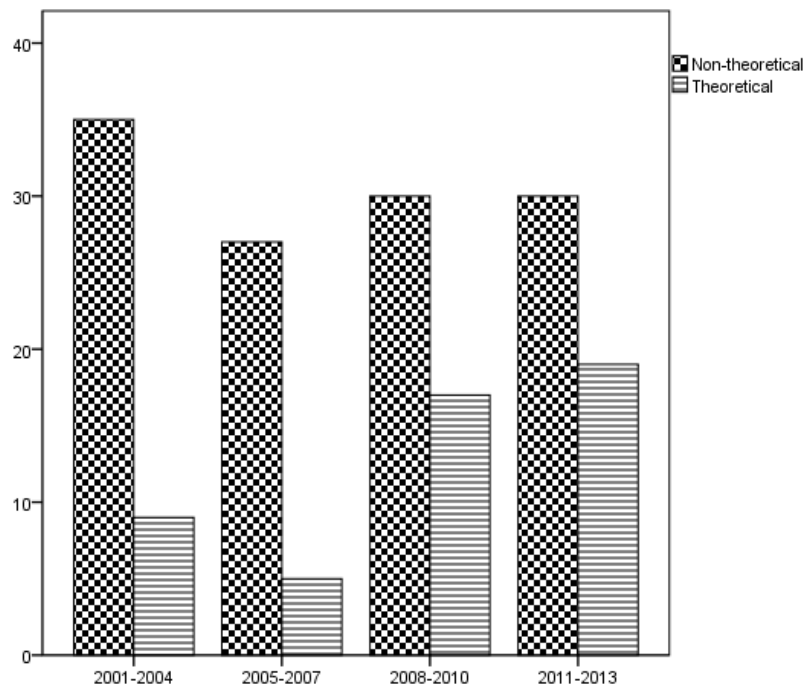
RESULTS

The first question involved determining the extent to which public procurement research is theoretically grounded. Out of analysing 172 articles published in the *Journal of Public Procurement* between 2001 and 2013, exactly 50 contained an identifiable theory that was used to frame the study or discussion. This translates to 29 percent of all reviewed articles. To further investigate the theoretical character of public procurement, we disaggregated research into four distinct time periods: 2001-2004, 2005-2007, 2008-2010, and 2011-2013. We then examined the incidence of theoretical articles in each period (Figure 2). Statistical testing using Pearson's Chi Square led to a rejection of the null hypothesis that theory use and time period were independent. Instead, we found a statistically significant relationship between the use of theory and the time period in which an article was published ($p < .05$). The strength of this association is low-moderate, as indicated by a Cramer's V of .21. More fine grained analysis revealed that theoretical articles were more prevalent in the two most recent time periods, 2008-2010 and 2011-2013. This reflects an upward trend in theory use in public procurement research. So while nine of the forty-four articles (20%) published between 2001 and 2004 and five of the thirty-two articles (15%) published between 2005 and 2007 were found to be theoretical, this rises to seventeen of forty-seven articles (36%) between 2008 and 2010 and nineteen of forty-nine articles (39%) between 2011 and 2013.

Having established that 29 percent of articles had a theoretical grounding, the second question investigated what theories were used. Our results, listed in Table 3, show that theory of auctions & competitive bidding is the most singularly used theory in public procurement. The next most used theory is principal-agency theory and, after this, transaction cost economic theory, contract theory and general systems theory. Seven of the fifty articles used a combination of theories. Among these were five articles that combined two theories; for example, Glock & Broens (2013) integrated organization behaviour theory with contingency theory. Two articles used four major theories; for example, Apte et al., (2011) used principal-agent theory, transaction cost economic theory, contract theory and supply chain management theory. Sixteen of the fifty theoretically grounded articles used theories that were not contained in our pre-specified list and were assigned to the "all other theories" category. Included here was a broad theoretical range, including theory of professions, theory

of leadership, social network theory, fuzzy set theory, theory of lean and theory of self-determination.

FIGURE 2
Theoretical Articles between 2001 and 2013



After identifying the most frequently used theories we turned our attention to the underlying disciplines on which public procurement research is based. For the purposes of this analysis each theory is said to have its antecedents in one of four distinct social scientific disciplines. These are economics, psychology, sociology and management. Each of the 50 theoretical articles was attributed to one of these four categories. In the case of articles using a combination of theories, attribution was made on the basis of the first listed theory appearing in the article.

TABLE 3
Individual Theories and their Frequency

Theory	Frequency
Theory of auctions and competitive bidding	8
Principal-agent theory	5
Contract theory	3
Transaction cost economic theory	3
General systems theory	3
Institutional theory	2
Organization behaviour theory	2
Supply chain management theory	1
Combination of theories	7
All other theories	16
Total	50

In the majority of cases the matching of an individual theory to one of the four foundational disciplines was a straightforward process. Theory of auctions and competitive markets, principal-agent theory and transaction cost theory are recognisable as economic theories. Leadership theory and self-determination theory belong to psychology. Social constructivism and institutional theory are sociological in character. Organization behaviour theory and supply chain management theory are associated with management. In the case of general systems theory, which is multi-disciplinary, we believe it is synonymous with the sociological discipline and coded it accordingly.

The results, which are contained in Table 4, show that economics has been the most prominent discipline informing public procurement research. It accounts for over half of theory-based articles. Twenty-eight of the fifty theoretically grounded articles (56%) have their antecedents in economic theory. Examples include theory of auctions and competitive bidding, principal-agent theory, transaction cost economic theory and contract theory. The sociology discipline accounts for nine of the theoretically grounded articles (18%), with examples including general systems theory, institutional theory and social constructivism. The management discipline also accounts for nine articles (18%), with organization behaviour theory, theory of innovation and theory of lean relevant here. Lastly, theories with a psychological basis were found in four articles (8%), and include theory of self-determination and leadership theory.

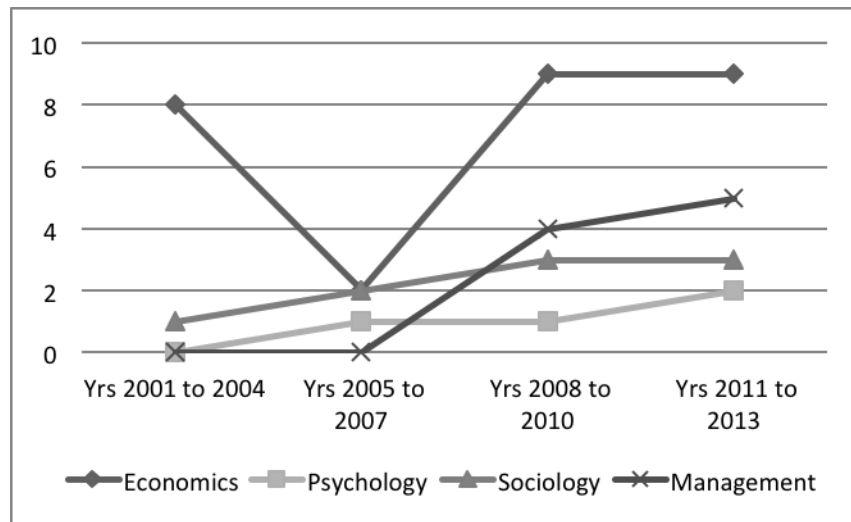
TABLE 4
Disciplinary Influences in Public Procurement Research

Discipline	Frequency	Percentage	Individual Theories
Economics	28	56%	Theory of auctions & competitive bidding Principal-agent theory Transaction cost economic theory (including in combination with other theories) Contract theory (including in combination with other theories) Fuzzy set theory Game theory (including in combination with other theories) Classic economic theory New institutional economic theory
Sociology	9	18%	Institutional theory General systems theory Social constructivism Social exchange theory Social network theory Theory of professions
Management	9	18%	Organization behaviour theory (including in combination with other theories) Supply chain management theory Healthcare management theory Organization learning theory Theory of innovation Theory of lean
Psychology	4	8%	Leadership theory Process theory (of trust) Theory of self-determination
Total	50	100%	

Further analysis of the impact of the four different disciplines on public procurement research over the last decade is revealing (Figure 3). It shows that economic-based theories were dominant between 2001 and 2004 before sharply decreasing in frequency between 2005 and 2007. They increased again between 2008 and 2010 and

this has continued right up to the most recent time period of 2011-2013. The pattern of use of sociological and psychological theories has remained relatively stable over the four time periods, with each discipline showing incremental increases. In contrast, management science theories were absent between 2001 and 2004 and again between 2005 and 2007. The number of articles using a management theory increased to four between 2008 and 2010 and reached five between 2011 and 2013. The situation is one in which economic theory still predominates but management theory is increasing in use.

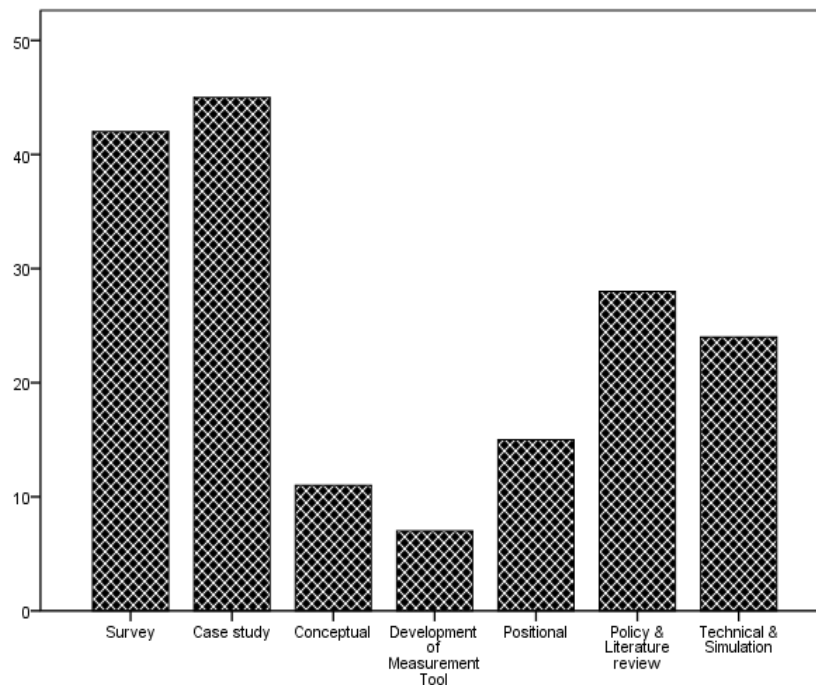
FIGURE 3
Disciplinary Influences between 2001 and 2013



The third question focused on paper type within public procurement research. By this is meant the form that each article assumed, whether survey, case study, policy & literature review, technical & simulation paper, positional paper, conceptual paper, or development of measurement tool. Each of the 172 articles was assigned to one of these seven categories. In instances where an article encompassed two or more of the above forms, categorisation is based on the dominant thrust of the article. To illustrate, in a literature review that incorporates interviews with subject matter experts, as is the case with Patil & Moleenar (2011), the article was coded as policy & literature review. The results, which are displayed in

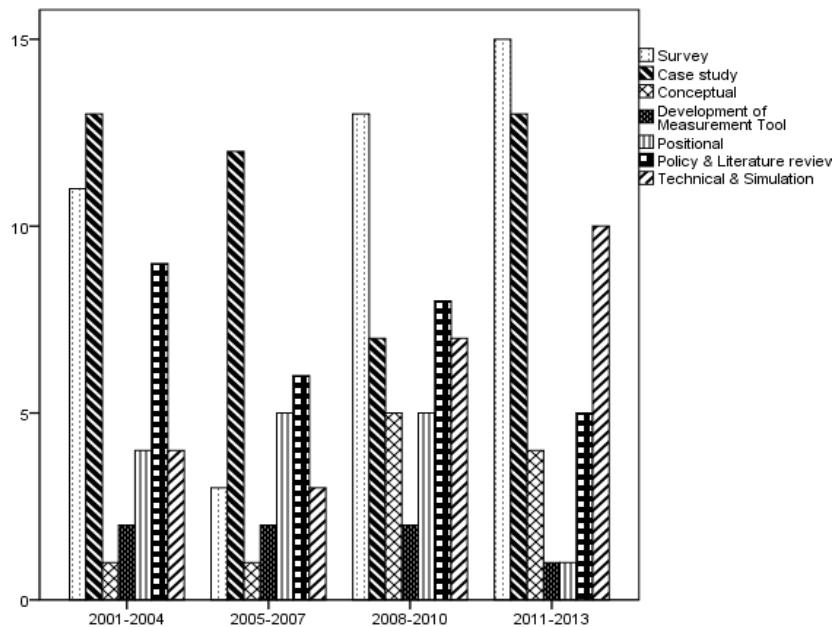
Figure 4 show that case studies are the most common paper type, closely followed by survey-based articles. Together, case studies and surveys accounted for half of all paper types (50.6%). Next are policy & literature reviews and then, in descending order, technical & simulation papers, positional papers, conceptual papers, and papers dedicated to the development of measurement tools. Additional analysis indicated a statistically significant relationship between paper type and the presence of theory ($p < .05$). Theoretically grounded articles were concentrated among conceptual, technical & simulation, case study, and survey paper types. All but one of the conceptual articles and approximately one out of every three technical & simulation, case study and survey articles were found to be theoretically grounded. Conversely, theory was found to be all but absent in policy & literature reviews, positional papers, and development of measurement tool papers. Only three of the twenty-eight policy & literature review papers employed a theoretical lens.

FIGURE 4
Paper Type in Public Procurement Research



Trends in paper type are discernible over time (Figure 5). Articles which report on survey data featured prominently over the time period as a whole. Between 2001 and 2004 there were eleven such articles, dropping to three in 2005-2007, and rising to thirteen and fifteen in the two subsequent time periods. A similar pattern is repeated with case studies. There were thirteen case study articles in 2001-2004, twelve in 2005-2007, seven in 2008-2010, and thirteen in 2011-2013. The number of conceptual papers increased in the two most recent time periods, going from just a single conceptual paper in each of the 2001-2004 and 2005-2007 periods to five papers in 2008-2010 and four in 2011-2013. A reversal of this trend applies to positional papers, which went from five in 2008-2010 to one in 2011-2013. Articles that review policy & literature are consistently present between 2001 and 2013. Technical & simulation papers show a strong increase, going from three in 2005-2007 to seven in 2008-2010 and ten in 2011-2013. Summarising, case studies and surveys have been the dominant paper types throughout the period under investigation, with policy & literature reviews maintaining a steady presence, and technical & simulation papers latterly increasing in frequency.

FIGURE 5
Trends in Paper Type between 2001 and 2013



Question four examined the focus of public procurement research. First, the topic of each of the 172 articles was recorded verbatim; for example, “the impact of e-procurement on organizational performance.” Next, articles were divided into one of three categories. The first category comprised research on the individual characteristics and motivations of public buyers (individual). The second category was made up of research that treats public procurement as an organizational process or that in some way relates to organizational decision making and organizational management (organizational). The third category consisted of regulatory and policy research in public procurement (macro perspective). The third category also included articles that discussed the development of the public procurement field. Results from this analysis are contained in Table 5. They show that research on the characteristics and behaviours of public buyers is low. Only 13 of the reviewed articles (7.5%) had a micro level of focus. Research that took a macro lens to public procurement is more common, with 55 articles (32%) falling into this category. This means that approximately 60% of research is oriented towards investigating the organizational dimensions of public procurement. No significant change in research focus is discernible between the four time periods. To demonstrate, two articles focused on the individual characteristics of public buyers in 2001-2004 and this was repeated in 2011-2013; twenty-six articles assumed an organizational lens in 2001-2004 and thirty-two did likewise in 2011-2013; and there were sixteen articles that took a macro-level perspective in 2001-2004 and fifteen in 2011-2013.

Studies that assume an organizational level of analysis are diverse. They range from e-procurement impacts to sourcing suppliers and from designing procurement competitions to optimising tender evaluation systems. To assist our analysis and in the interests of clarity we broke down all articles with an organization-level focus into 11 sub-categories. These are also listed in Table 5. Research at the technology-procurement interface is the most prominent line of inquiry among all organization-focused public procurement studies. Issues surrounding contract administration, risk management, and contract performance collectively constitute the second major line of inquiry. After these, research foci are evenly spread among supplier management, organizational ramifications of contracting-out the provision of public services, configuration and management of the procurement function, costing & pricing models, and designing

procurement competitions. To a lesser extent tender evaluation systems and sector-specific procurement strategies form research clusters. Logistics and project management have a marginal and singular presence respectively.

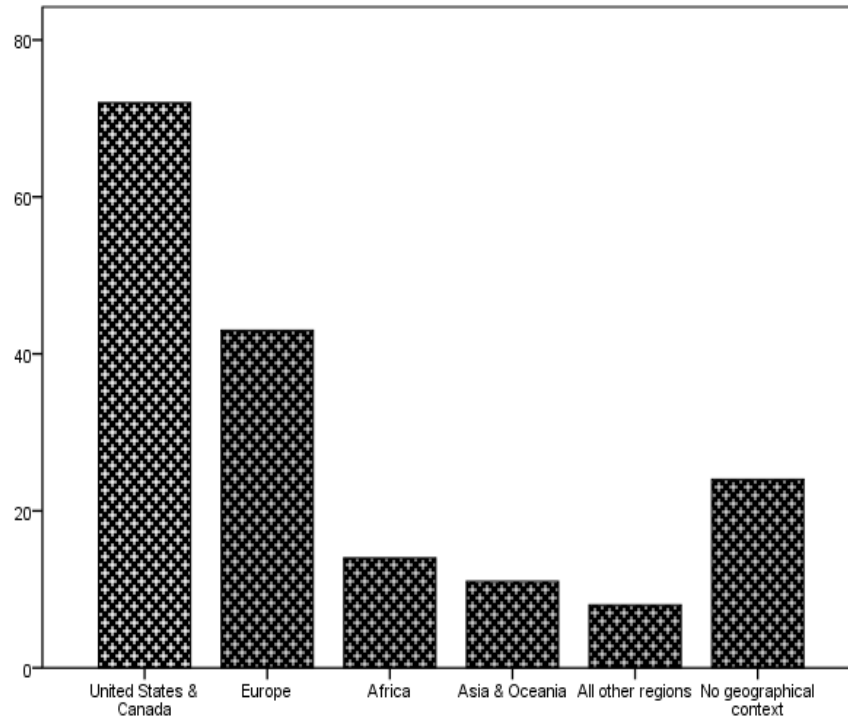
TABLE 5
Public Procurement Research Foci

		Frequency	Percentage
Individual (characteristics & motivations of public buyers)		13	7.5%
Organizational			
1. Technology-procurement interface	22		
2. Contract administration/risk management/ performance management	14		
3. Suppliers	10		
4. Contracting-out/outsourcing	10		
5. Organization/management of procurement function	10		
6. Costing & pricing models	10		
7. Procurement competition design	10		
8. Tender evaluation systems	7		
9. Sector-specific procurement strategies	7		
10. Logistics	3		
11. Project management	1		
Total		104	60.5%
Macro perspective (regulations & policies)		55	32%
Total		172	100%

The fifth and final research question investigated the regional origins of public procurement research. Where applicable, the country or region referred to in the article was initially recorded. Eighty-six percent of the total number of articles was associated with some country or region. Individual countries or regions were grouped into five major regions of the world: United States & Canada, Europe (incl. Turkey), Africa, Asia & Oceania, and all other regions. As shown in Figure 6, the United States & Canada has been the primary source of public procurement research, accounting for seventy-two (42%) of the total number of articles. Europe has been the second most important region. It accounts for forty-three articles (25%). Africa comes third (8%), followed by Asia & Oceania (6%) and all other regions (4%). The

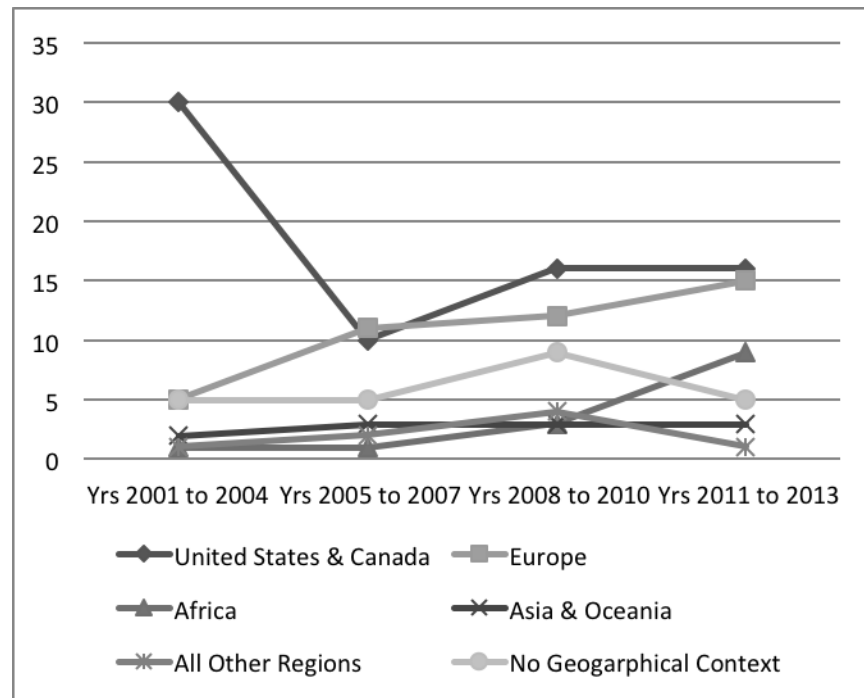
latter includes Central & South America, Russia and inter-regional studies.

FIGURE 6
Regional Origins of Public Procurement Research



Additional analysis indicates that a gradual transition in the origins of public procurement research may be under way (Figure 7). United States & Canadian articles, while still dominant, have fallen from a high point of thirty between 2001 and 2004 to sixteen between 2011 and 2013. In contrast, articles originating in Europe have increased from five between 2001 and 2004 to fifteen between 2011 and 2013. Similarly, articles of African provenance have grown from just one between 2001 and 2004 to nine between 2011 and 2013. There is less change detectable in research from Asia & Oceania. Central & South America, Russia and the Middle East remain peripheral in terms of article contributions.

FIGURE 7
Regional Origins of Research between 2001 and 2013



DISCUSSION

This paper has sought to elucidate the role that theory has played in public procurement research in recent times. While theory is recognised as integral to disciplinary development in management science (Colquitt & Zapata-Phelan, 2007; DiMaggio, 1995; Hambrick, 2007; Whetten, 1989), little is known of its use in the public procurement field. With public procurement moving out of its formative phase, this gap in our knowledge is becoming less acceptable. As a research community we have reached the point at which evidence-based understandings of the extent and form of theory use are needed. The objective of the paper was to provide evidence and bring clarity to the question of theory's use in public procurement research. The results point to a relatively low level of theoretical application in public procurement research. Only 29 percent of reviewed articles were found to be theoretically grounded. To get a better sense of this figure it is instructive to compare the

extent of theorising in adjacent fields. In supply chain management the percentage of published research that is theoretical in form is estimated to be 37 percent by Chicksand et al., (2012) and 53 percent by Defee et al., (2010). Ostensibly, public procurement is under-theorised and has some way to go before it attains parity with supply chain management.

Before reading too much into these comparably higher figures, some caveats need to be introduced. Firstly, public procurement is not as established as supply chain management. Its acceptance as a management sub-field and its emergence as a profession are only recent occurrences (Matthews, 2005; Prier & McCue, 2009). It is to be expected that public procurement is less theoretically developed than supply chain management. Secondly, supply chain management is undergirded by a large and long established community of interest. The number of dedicated journals in the supply chain field can be taken as a proxy of its academic embeddedness. Again, it seems intuitive that the breadth and depth of supply chain management compared to public procurement should correlate with a higher incidence of theory. A third caveat centres on how theory is defined and measured. Depending on one's definition of theory, the results of a literature review can produce markedly different outcomes. Chicksand et al., (2012) made this same observation when noting the higher percentage figure of theoretically grounded articles reported by Defee et al., (2010) compared to their own. Thus, our determination that 29 percent of public procurement research is theoretically grounded is not strictly comparable with foregoing results on the extent of theory use in supply chain management or related fields.

Caveats aside, it is evident that most public procurement research is not theoretical; if by theoretical we mean the presence of a system that is capable of explaining and predicting individual and social phenomena. The challenge becomes one of increasing the number of theoretically grounded articles and striking a better balance between academic rigour and practitioner relevance. There are encouraging signs that this may be simply a matter of time, a matter of field maturation. Extrapolating from trends in our analysis, the frequency of theoretically grounded articles appears to be increasing with time. At the end of 2004 and 2007 theoretically grounded articles numbered 20 percent and 15 percent respectively. By 2010 this figure had reached 36 percent, and by 2013 it had climbed to 39 percent. If this upward trajectory is to continue apace, public procurement will strengthen its credentials and affirm its status as an important sub-field of management. It is important that

the continuation of this positive trend is not viewed as inevitable. As a research community we must guard against complacency and be proactive in consolidating the gains already made. It behoves all of us acting in various capacities – researchers, reviewers, editors – to seriously consider how theory can be deployed in ways that explicate our phenomena of interest. In the early, exploratory period of the public procurement field a laissez-faire attitude to theory may have been permissible. Now we are entering a phase where more diligence and rigour is both expected and required.

This leads us to contemplating what theories have been used in public procurement research. It also prompts us to reflect on what theories are notable by their omission. On the first point, we begin by acknowledging that public procurement is theoretically eclectic, reflective of input from across a diverse range of fields and disciplines. With different academic backgrounds come different theoretical perspectives, different methodological preferences, and different research interests. At the same time it is clear that theories belonging to the economics discipline, micro-economics specifically, have predominated. Micro-economic theories such as competitive auctions & bidding, principal-agent theory and transaction cost economic theory account for over half of all theoretical articles. Their prevalence signals a particular interpretation of public procurement: as a decision-making process that requires optimisation, as an impersonal and rule-bound transaction between two or more economic parties, and as something that is rational and amenable to quantification. While not all researchers will be comfortable with this interpretation or wish to adopt a micro-economic lens, the high incidence of articles using the same or similar micro-economic theories is helping to build a critical mass of knowledge. This is precisely what public procurement needs if further progress is to be made.

Theories that have their antecedents in sociology, psychology and management are also to be found. Their application is symbolic of other ways of seeing public procurement. Sociological and psychological lenses enable researchers to grapple with the human dimension of public procurement and address questions over the characteristics of public sector buyers and the factors that explain why they exhibit particular behaviours in response to organizational and environmental stimuli. Out of the four disciplines under which we categorise all listed theories, psychology is the least used. This corresponds to another finding, discussed below, that studies on public sector buyers themselves are comparably few. Sociological

theories appear in greater number and speak not only to the policy, governance and societal dimension of public procurement research but also to issues of organizational functioning and even public buyer characteristics. Management science theories have become more widely used in recent years. Whereas no management theory was detected for the first two time periods of our analysis, this had changed in the third and fourth periods so that management theory is now second only to economics. The utility of management theories can be seen, *inter alia*, in relation to the role and position of procurement within the organization. Indicative of its potential in this regard is the application of a theory of lean by Waterman & McCue (2012) and Schiele & McCue (2011) to explain efficiency imperatives in public sector purchasing. The observed preference for management theory in more recent years could be the result of a number of factors, including more management researchers engaging with public procurement or heightened awareness of the strategic potential of purchasing. Whatever the reasons, management theory is indispensable if we are to arrive at a more complete understanding of public procurement.

In the main, the theories identified throughout the review are as anticipated. More surprising are the theories, historical and contemporary, that do not feature at all, or that do so only to a limited degree. In the former group we note the absence of stakeholder theory as pioneered by Edward Freeman (1984), dynamic capabilities theory articulated by Teece, Pisano & Shuen (1997) and the much earlier bureaucratic management theory synonymous with Max Weber (1978). These by no means represent an exhaustive list of omitted theories, nor do we offer them as theoretical panaceas. Rather, we highlight them as among some of the more obvious omissions from public procurement scholarship to date. Taking just the first of these three examples, stakeholder theory lends itself to explaining why it is that public sector purchasing across jurisdictions increasingly concerns itself with accommodating small suppliers, fostering equality of opportunity and social cohesion, and safeguarding the natural environment. For public procurement research, the use of stakeholder theory would allow for a more forensic examination of how and under what circumstances various stakeholder interests are represented in national policies and organizational procurement practices.

The limited application of major theories is also noteworthy. Two, in particular, stand out for us. The first is supply chain management theory. It features only once in the 172 articles reviewed. Gianakis &

McCue (2012) used it to make sense of transformative procurement practices across four organizations. This is surprising given the overlap between procurement and supply chain management disciplines. The second is institutional theory. We identified only two instances of its application. Akenroye (2013) attempted to explain the emergence of social criteria in supplier selection decisions in terms of institutional forces bearing on organizations. Dickens-Johnson (2008) applied institutional theory's ideas on the structuration of organizational fields as a lens through which to understand public sector outsourcing trends. This is surprising as institutional theory has potential to inform public procurement research by explaining and predicting structural and behavioural isomorphism among organizations (Di Maggio & Powell, 1983), organizational avoidance of regulatory and policy pressures (Oliver, 1992), the institutionalization and deinstitutionalization of norms and operating standards (Hirsch, 1985), and the evolution of institutional fields (Hoffman, 1999). These are just two instances of theories that have yet to be fully exploited in public procurement research. There are many more besides. Greater awareness needs to be shown over how these theories can be deployed so as to enhance the validity and utility of public procurement research in the years ahead.

In addition to theory we examined three additional indicators of disciplinary development. The first of these related to paper type. Our findings reveal that case studies and surveys are dominant, with the frequency of both spiking in recent years. Similar patterns have been reported for operations management (Taylor & Taylor, 2009) and supply chain management (Chicksand et al., 2012). Policy & literature reviews, technical & simulation papers, positional papers, conceptual papers, and papers devoted to the development of measurement tools appear in order of descending frequency in our review. The range of paper types is testament to the catholic nature of public procurement research and its ability, up to this point, to accommodate plurality. Whether this is sustainable in the long-term is moot. Pfeffer (1993) has long argued that diversity and permissiveness in management research militates against its disciplinary development. Researchers in public procurement must also be alive to this potential pitfall. The finding that theory is clustered among conceptual, technical & simulation, case study and survey papers suggests that it is these which are deserving of greatest future attention. The corollary is paper types that do not use theory - policy & literature reviews, positional papers and development of measurement tools - should be deemphasised. As

the field grows these issues could act to resolve themselves whereby policy & literature reviews and positional papers are subsumed into empirical papers, as one possibility.

As with paper type, the focus of research in public procurement is arrayed from psychological motivators for public buyers lying at one end of the spectrum to international regulatory frameworks at the other. In their respective ways these individual and macro perspectives each constitute promising lines of inquiry and usefully serve as focal points for future research. The former is deserving of more attention than has been the case up to this point. While the public procurement field has received criticism over its ill-defined boundaries (Prier & McCue 2009), these two areas embody promising and clearly marked-out avenues for on-going inquiry. Between the individual buyer and the macro policy poles resides research that focuses on the organizational dimension to public procurement. If the aforementioned poles are relatively self-contained and coherent, the latter is less so. Accounting for 60 percent of all articles, it includes the procurement-technology interface, the design of procurement competitions, costing & pricing models, supplier engagement issues, and the structure and operation of purchasing departments, among other topics. It is at this organizational level that the diffuse nature of public procurement research is evident. It is also at this level that we see the various ways in which the foundational disciplines of economics, sociology, psychology and management are all brought to bear. Drawing on the work of Harland et al., (2006, p. 736), there is little evidence of an “explicit discipline debate” within public procurement. Instead, there are numerous lines of inquiry, some more productive than others. In the interests of coherency and disciplinary advancement, we suggest that the focus of future research is narrowed to fewer topics, preferably ones unique to our field. Promising lines for future inquiry include technology-procurement, contract management, and the design of procurement competitions and tender evaluation systems.

Finally, it is worth commenting on the geographic origins of public procurement research. There is no doubt that studies to date have originated mainly from the United States and Europe, with these two regions accounting for two out of every three articles reviewed. Public procurement is no different from management science in having a Western-centric character. Our trend analysis suggests that United States & Canadian input is plateauing while European and African input is rising. Looking into the future, we expect that contributions by academics and practitioners in developing countries will increase as

their economies grow and their systems of public administration and policy making evolve. At the same time, lesser developed regions stand to gain from the past experience, both good and bad, of countries and regions currently at the vanguard of public procurement. In this sense the more international the debate the better.

CONCLUSION

Our paper is a timely contribution to the debate on theory in public procurement. It also serves to complement previous field reviews, such as Thai's (2001) impressive history of public procurement policies and practices in the United States. It is not without its limitations, however. Firstly, our review is not exhaustive as we confine our search to a single journal. As a consequence, published research that appears in other scholarly outlets escapes our analysis. Future attempts at reviewing the theoretical base of public procurement may consider widening their search and take in three-five journals, as per Chicksand et al., (2012) and Defee et al., (2010), or even search a selection of the major academic databases so as to capture all published research. A word of warning, however; in embarking on such a task one should be mindful of the varied nomenclature that surrounds public procurement – public purchasing, public contracting, sourcing, procuring – and the difficulties this poses when undertaking any systematic literature review. Secondly, any theoretical review is immediately confronted with the quite vexing question of what is theory. We adhere to a standard and universally accepted definition of theory as a systemised structure capable of explaining and predicting individual and social phenomena (Colquitt & Zapata-Phelan, 2007; Hambrick, 2007). We acknowledge that in adhering to this definition we exclude what Weick (1995) has termed the “interim struggles” that go into making up a theory, such as the reporting of empirical patterns or the construction of frameworks and models. Future reviews may opt for a more malleable interpretation and definition of theory in which theoretical “works in progress” are included. Thirdly, methods to analyze the content of a large body of scholarly work are rarely flawless and invariably have some small degree of inaccuracy (Taylor & Taylor, 2009). Our review is no exception in this regard. Some articles had more than one research foci, which required us to make a judgement call on the dominant thrust of the article. Limitations notwithstanding, our paper is among the first to systematically analyze public procurement scholarship over the last decade.

The role of theory in public procurement research has gone largely unaddressed. Our aim in this paper was to determine the degree to which extant research is theoretically grounded and to shed light on what theories have been used to date. Our results indicate that the field is relatively under-theorised, but that this is beginning to change as more recent contributions attempt to anchor their studies in established theories. One may interpret the relatively low levels of theoretical application as akin to a liability of newness, and something that the field will surmount with age and experience. The same can be said of its numerous paper types and dispersed research foci, which may well start to coalesce with time. Significant strides have been made over the last decade in advancing the credentials of public procurement as a management sub-field. We are now reaching the point where it is necessary to push on if we are to transition from a “popularist science” to a “pragmatic science” in which rigour and relevance are equally balanced (Anderson et al., 2001). The onus lies with all of us to make sure that ten-fifteen years from now we can look back at yet more miles covered on the road to disciplinary credibility.

NOTES

1. There are a number of other publications related to public procurement. However, these are either practitioner periodicals, such as *Government Procurement*, or focused on case law related to public procurement, such as *Public Procurement Law Review*, *Procurement Lawyer*, and *European Procurement and Public Private Partnership Law Review*.
2. Volume 13 (2013) of the *Journal of Public Procurement* was not available at the time of writing and is not included as part of our review and analysis.

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Appendix B

Questionnaire instrument

1. How many years experience do you have in procurement?

2. In a typical week how much of your work time is spent on procurement-related activity?

- ☐ 0%
- ☐ 1-25%
- ☐ 26-50%
- ☐ 51-75%
- ☐ 76-100%

3. Do you hold a procurement-related qualification?

- ☐ Yes
- ☐ No

4. Are you familiar with the content of Circular 10/14: Initiatives to Assist SMEs in Public Procurement?

- ☐ Yes
- ☐ No

5. Please state your highest level of qualification

- ☐ Leaving Certificate
- ☐ Third level certificate
- ☐ Third level diploma
- ☐ Bachelor degree
- ☐ Master's degree
- ☐ PhD

6. In what type of public sector organisation are you employed?

- ☐ Central government authority
- ☐ Local government authority
- ☐ State agency
- ☐ Semi-state company/utility
- ☐ Education institution (e.g. school, university, institute of technology, V.E.C)
- ☐ Other

7. How many employees are in your organisation?
- ☐ 1-9
 - ☐ 10-49
 - ☐ 50-249
 - ☐ 250+

8. Do you.....

Advertise all supply contracts valued above 25,000 euro and or works contracts valued above 50,000 euro on eTenders

- ☐ Yes
- ☐ No

Enable firms to submit their tenders online through eTenders

- ☐ Yes
- ☐ No

Publish Prior Information Notices (PIN) on eTenders

- ☐ Yes
- ☐ No

Publish contract award notices on eTenders

- ☐ Yes
- ☐ No

9. Do you carry out market analysis prior to issuing a request for tender?

- ☐ Yes
- ☐ No

10. Which tendering procedure do you use in the case of supply contracts worth up to 134,000 euro and/or work contracts worth up to 250,000?

- ☐ Restricted procedure (i.e. pre-qualification of candidates)
- ☐ Open procedure

11. Do you allow tenderers to do the following at the initial phase of any competition.....

Self-declare their financial capacity

- ☐ Yes
- ☐ No

Self-declare their insurance cover

- ☐ Yes
- ☐ No

12. Which option best describes purchasing in your organisation?

- ☐ Purchasing is reactive and uses 'quick fixes' to solve problems
- ☐ Our purchasing techniques and practices are the best available
- ☐ Purchasing techniques and practices strengthen our competitive position
- ☐ Purchasing informs and helps to implement our strategy

13. Do you indicate in requests for tender that you are prepared to consider reasonable variants to the specifications?

- ☐ Yes
- ☐ No

14. Is it the case that you.....

Accept alternative proof of financial capacity if tenderers are having difficulty meeting the original requirements

- ☐ Yes
- ☐ No

Use broadly defined qualification criteria so as to maximise the number of eligible tenderers

- ☐ Yes
- ☐ No

Provide written feedback to unsuccessful tenderers

- ☐ Yes
- ☐ No

15. At what level do you set the 'company turnover-to-turnover value' ratio for routine supply contracts?

- ☐ Not more than twice the estimated contract value
- ☐ More than twice the estimated contract value

16. Do you use model tender and contract documents issued by the Office of Government Procurement (OGP)?

- ☐ Yes
- ☐ No

17. How is procurement managed in your organisation?
- ☐ On a centralised basis
 - ☐ On a decentralised basis
18. At what level do you set insurance requirements for routine supply contracts?
- ☐ Employer's Liability of 12.7 million euro and Public Liability of 6.5 million euro
 - ☐ At levels higher than the above
19. Do you evaluate life-cycle costs of products/services when making a procurement decision?
- ☐ Yes
 - ☐ No
20. Do you manage contract competitions by taking any of the following actions.....
- Divide contracts into lots
- ☐ Yes
 - ☐ No
- Encourage consortium bids by, for example, highlighting this possibility in the request for tenders
- ☐ Yes
 - ☐ No
- Devise framework agreements so as to allow for the inclusion of small firms
- ☐ Yes
 - ☐ No

21. Please give your opinion on the following statements.

	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
Facilitating SME participation in contract competitions is important to my reputation as a public buyer					
SME participation in contract competitions results in more competitive bid prices for my dept./organisation					
Facilitating SME participation in contract competitions is compatible with optimising value for money and complying with EU law					
A procurement goal of my dept./organisation is to facilitate the broadest participation of suppliers in contract competitions					
SME-friendly policy limits my discretion as a buyer					
There are consequences for me from not following 'SME-friendly' policy					
The majority of buyers I know take steps to facilitate SME participation in contract competitions					

Appendix C

Qualitative instrument used in the peer review process of the predictive model, its constructs and associated measures

Details of the peer review panel

Investigating public buyer compliance with SME-friendly policy

Research overview

The focus of the research is on public buyers' compliance with policies aimed at facilitating SMEs in public contract competitions. It intends to shed light on how SME-friendly procurement policy is working out in practice. Specifically, the research seeks to answer two broad questions:

1. *To what extent are public buyers complying with SME-friendly procurement policy?*
2. *How do institutional pressures affect public buyers' compliance with SME-friendly procurement policy?*

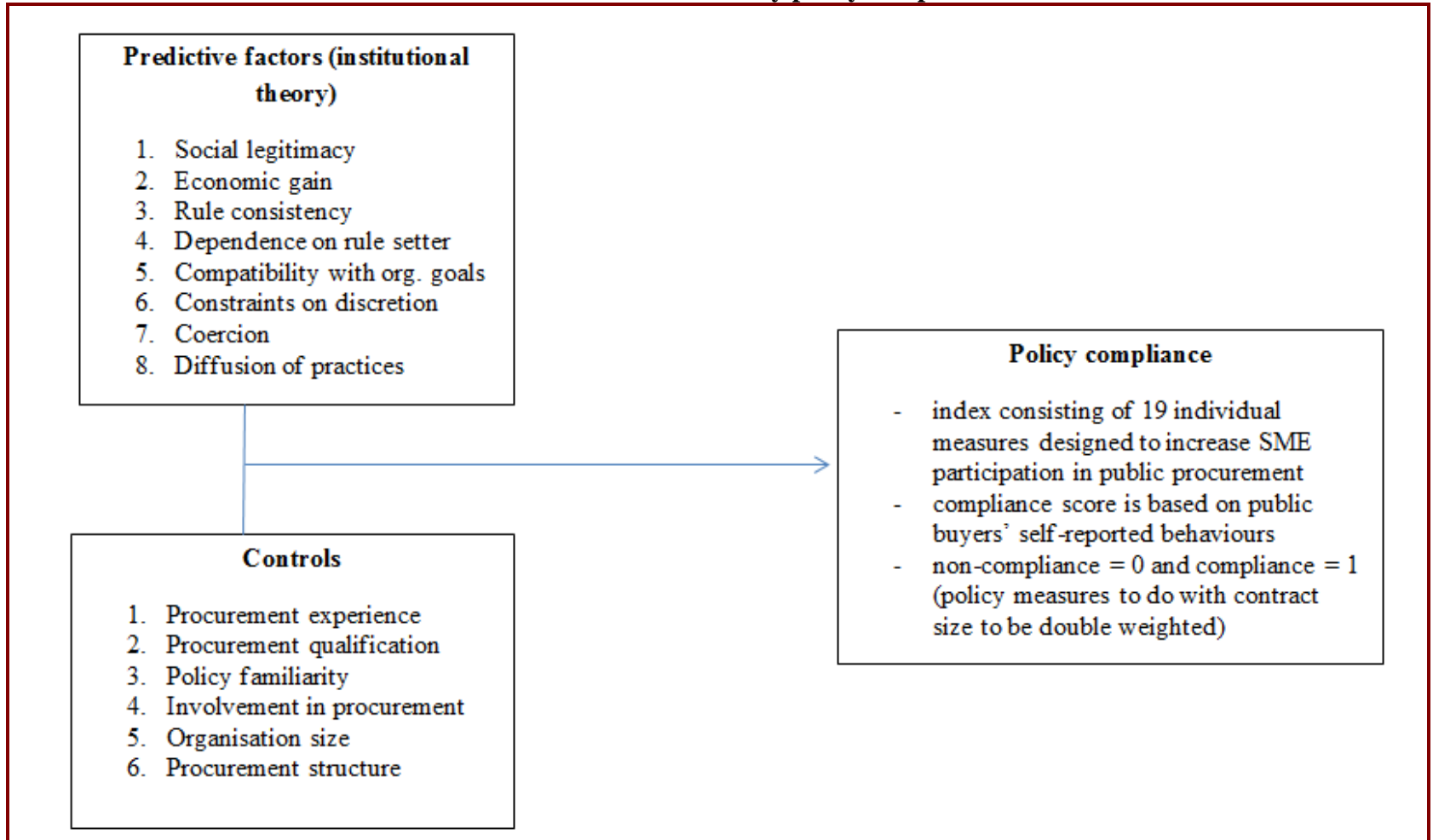
Model testing

A theoretically-informed model to explain and predict public buyers' compliance with SME-friendly policy will be tested as part of this study (see pg. 2). The independent variables (predictors) in the model are derived from institutional theory and include such factors as social legitimacy and economic gain. The dependent variable is compliance with SME-friendly procurement policy. The model also controls for a number of characteristics related to public buyers and their organisations. The independent, dependent and control variables are also listed on pages 3-5.

Your input

I would be grateful if you could review the operationalisation and measurement of each variable and comment on them as you feel appropriate. I would also appreciate your assessment of the predictive model and the overall design of the study.

Predictive model of SME-friendly policy compliance



Independent variables and their operationalisation (draft form)

	Predictive factor	Operationalisation	Measurement	Comment
1	Social legitimacy	<i>Facilitating greater SME participation in contract competitions is important to my reputation as a public buyer</i>	Likert scale 1-5 1 = strongly disagree 5 = strongly agree	
2	Economic gain	<i>My organisation can gain in economic terms from more SME participation in contract competitions</i>		
3	Institutional rule consistency	<i>Facilitating SME participation in contract competitions can be difficult because of pressures to optimise value for money</i>		
4	Compatibility of institutional pressure with organisational goals	<i>Greater participation by SMEs in contract competitions is consistent with the goals of my organisation</i>		
5	Constraints on professional discretion	<i>Abiding by 'SME-friendly' policy imposes constraints on how I can procure goods and services</i>		
6	Coercion	<i>There are consequences from failing to act on 'SME-friendly' policy</i>		
7	Diffusion of practices	<i>Measures to facilitate greater SME participation in contract competitions are used by other public buyers known to me</i>		
8	Dependence on institutional rule setter	<i>In which type of public sector organisation are you employed?</i>	Central govt. Local govt. State agency Semi-state Education institution Other	
Overall comment				

Controls and their operationalisation (draft form)

Control variable	Operationalisation	Measurement	Comment
Experience in procurement	How many years have you worked in procurement?	No. of years	
Involvement in procurement	What % of your work-time taken-up with procurement related-activity in a typical week?	0% 1-25% 26-50% 51-75% 76-100%	
Qualification in procurement	Do you hold a recognised qualification in procurement?	Yes No	
Policy familiarity (SME-friendly procurement)	Are you familiar with the content of Circular 10/14 Facilitating SME Access to Public Sector Contracts?	Yes No	
Organisation size	How many staff is there in your organisation?	1-9 10-49 50-249 250+	
Procurement structure	How is procurement managed in your organisation?	On a centralised basis On a decentralised basis	
Overall comment			

Dependent variable: policy compliance index

Are public buyers complying with the following 19 policy recommendations for the facilitation of SMEs	Yes/No
<ol style="list-style-type: none"> 1. <u>Online advertising</u>: advertise contracts for supplies and general services with an estimated value of €25,000 or more and works contracts with an estimated value of €50,000 or more on <i>eTenders</i> 2. <u>Prior Information Notices (PINs)</u>: communicate long-term purchasing plans to the market as early as possible by publishing PINs 3. <u>Open tendering procedure</u>: use open (competitive) tendering for contracts worth up to €134,000 for goods and services contracts and €250,000 for works contracts 4. <u>Qualification criteria</u>: use broadly defined qualification criteria in order to increase the number of eligible tenderers 5. <u>Self-declare financial capacity</u>: allow applicants to self-declare their financial capacity; seek evidence of capacity only in the event of the tenderer being short-listed or coming under consideration for the contract 6. <u>Self-declare insurance cover</u>: allow applicants to self-declare their insurance cover; seek evidence of cover only in the event of the tenderer being short-listed or coming under consideration for the contract 7. <u>Standard tender documents</u>: use standard documentation and tender templates 8. <u>Online tender submission</u>: promote the online submission of tenders by suppliers as the norm 9. <u>Dividing contracts into lots</u>: divide contracts into lots where appropriate and practical 10. <u>Openness to SME consortium bidding</u>: open to consortium bids by, for example, drawing attention to this possibility in the contract notice and/or by publishing PINs 11. <u>Framework agreements</u>: ensure that, where possible, the terms of framework agreements facilitate the inclusion of small firms 12. <u>Proportionate turnover requirements</u>: not set company turnover requirements at more than twice the estimated contract value for routine goods and services competitions 13. <u>Proportionate insurance requirements</u>: only require types and levels of insurance that are proportionate and reasonable in the context of the contract (types and limits specified in policy guidance) 14. <u>Flexible over proof of financial capacity</u>: be flexible over the type of proof of financial capacity they accept from tenderers 15. <u>Market analysis</u>: undertake market analysis prior to tendering in order to better understand the supply marketplace and what it can offer 16. <u>Variants to specifications</u>: indicate where they are prepared to accept reasonable variants to the specifications of the goods/services sought 17. <u>Life cycle costs</u>: take into account whole life-cycle costs associated with a purchase 18. <u>Feedback for tenderers</u>: provide written feedback as a matter of good practice and in fulfilment of their obligations under the EU Remedies Directive 2007/66/EC 19. <u>Publication of award notices</u>: publish all contract award notices over €25,000 on <i>eTenders</i> 	
Overall comment	

Peer review panel (academics and practitioners)

No.	Name	Institute/Employer	Title	Area of research expertise
<i>Academics</i>				
1	Professor Christine Oliver ³²	York University, Canada	Professor of Organization Studies Henry J. Knowles Chair in Organizational Strategy	Institutional theory and organisation studies
2	Kim Loader	University of York, UK	Lecturer in Public Finance	SMEs and public procurement
3	Professor Cliff McCue	Florida Atlantic University, US	Associate Professor, School of Public Administration	Public administration and procurement
4	Dr Gordon Murray	Tata Consultancy Services, UK	Strategic Procurement Specialist and Academic	Public procurement/sustainable procurement
5	Dr David McKevitt	University College Cork, Ireland	Lecturer in Management and Marketing	Public procurement; mentoring in public sector contexts
<i>Practitioners</i>				
6	Eileen O'Keefe	Dublin City University, Ireland	Procurement and Contracts Manager	-
7	Martin Kilbane ³³ and OGP staff	Office of Government Procurement (OGP), Ireland	Tender Operations Manager	-

³² The predictive factors tested in the model were derived from an institutional compliance framework put forward by Professor Christine Oliver (1991).

³³ The questionnaire was circulated among procurement professionals employed by the OGP. Martin Kilbane acted as the contact point before, during and after the survey was conducted.