

# CAN GOVERNMENT STIMULATE INNOVATION THROUGH PUBLIC FUNDING AND PROCUREMENT? WHAT SOUTH AFRICAN SERVICES FIRMS SAY

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Government invests a significant amount of public funding to promote, incentivise and support innovation in South African firms. Support mechanisms include initiatives such as the R&D Tax Incentive, Industry Innovation Partnership, Support Programme for Industrial Innovation, and Technology Stations. Given the right support from government, we should expect business to be better positioned to take their innovations further.

This Research Brief uses data from the Business Innovation Survey 2010-2012 to provide evidence of services sector firms' awareness\* of the array of public funding on offer for innovation. We report on the extent to which firms access this funding, if they benefit in other ways, and detail the reasons why they do not access public funding.

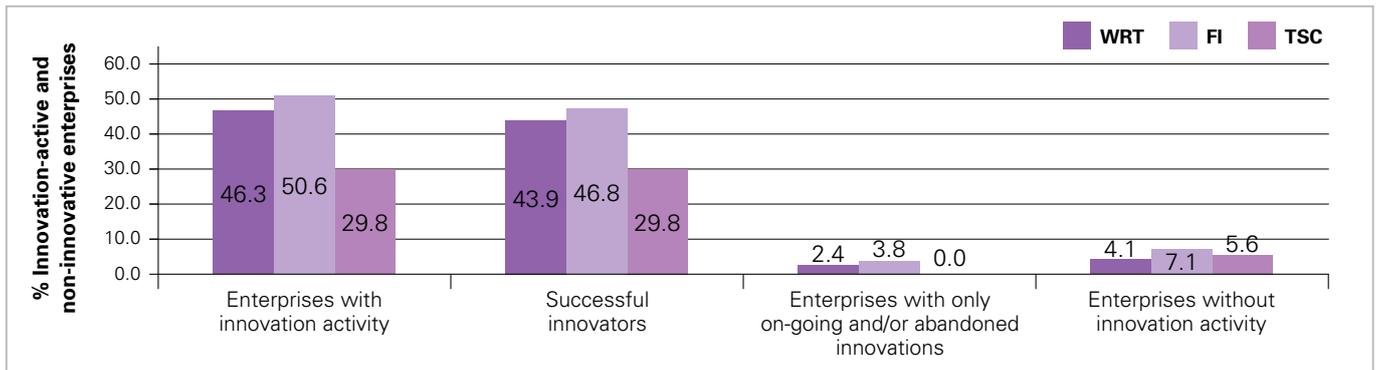
**\*Note:** Readers are cautioned that the survey's data does not represent the population of all firms in the South African services sector, but reflects the realised survey sample: 179 enterprises in Wholesale and Retail Trade (WRT); 107 enterprises in Finance and Intermediation (FI); and 93 enterprises in Transport, Services and Communication (TSC) (Moses et al, 2017). While this data is purely descriptive, it can provide important insights on the trends in public sector funding of innovation, from which we can draw policy implications to improve practice.

## To what extent are services firms aware of government financial support for innovation?

Firms were asked if they were aware that government offers financial support for innovation. We analysed the data separately for four groups, distinguished by the success of their innovation (Figure 1 overleaf). Around half of those firms in the FI (51%) and WRT (46%) sub-sectors, who reported innovation activity (whether completed, ongoing or abandoned), were aware of government support. There was substantially lower awareness amongst TSC firms (30%). A very similar pattern was observed for the firms who had successful innovations; except that slightly fewer of these firms in WRT and FI were aware of the available support. Those who had no innovation activity at all were barely aware of government's support; that is, less than 10% of firms (4% in WRT, 7% in FI, and 6% in TSC). Worryingly, those firms with on-going or abandoned activities were even less aware: 2% in WRT, 4% in FI and none in TSC.

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Figure 1. Services sector firms awareness of government funding



Source: Moses et al, 2017 (Appendix 4 Table A10.1)



**Policy Implication:** There is much that government can do to increase awareness of its funding mechanisms, particularly for firms who are currently not innovative, who may not be seeking information on funding for innovation, and those firms with fledgling innovation activity, who really need to be nurtured.

## To what extent do services firms access government financial support?

Adequate funding is a prerequisite for innovation activities, and firms report that funding factors are a significant barrier to innovation (Moses et al, 2017). Next to private sources of funding, innovation in South Africa is funded through different public sources: national government departments, national funding agencies, as well as foreign government sources.

Table 1 highlights the tiny number of firms that access public sources of funding. Firms in the FI sub-sector are more likely, and firms in the TSC least likely, to access these funds.

Firms are more likely to access innovation funding from the Department of Trade and Industry and other national government departments, than from the Department of Science and Technology (DST) (a total of 7 firms), particularly in the FI sub-sector.

Only one firm reported receiving funding from the Technology Innovation Agency and from the Medical Research Council. Four firms received funding from the National Research Foundation and Industrial Development Corporation, and six from other national funding agencies.

Funding from foreign public sources is negligible i.e. a total of five firms, which suggests that DST's bilateral funding mechanisms are not well utilised, at least, among this set of firms.

Table 1. Innovation-active enterprises that received financial support for innovation activities from government sources

Source of financial support	WRT		FI		TSC	
	n	%	n	%	n	%
<b>National government:</b>						
Department of Science and Technology (DST)	2	2.4	5	6.3	0	0
Department of Trade and Industry (dti)	2	2.4	8	10.1	1	1.8
Other	1	1.2	6	7.6	1	1.8
<b>National funding agencies:</b>						
National Research Foundation (NRF)	1	1.2	3	3.8	0	0
Medical Research Council (MRC)	0	0	1	1.3	0	0
Industrial Development Corporation (IDC)	2	2.4	1	1.3	1	1.8
Technology Innovation Agency (TIA)	0	0	1	1.3	0	0
Other	1	1.2	2	2.5	3	5.3
<b>Foreign government/public sources</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>5.1</b>	<b>1</b>	<b>1.8</b>

Source: Moses et al, 2017 (Appendix 4 Table A18)



**Policy Implication:** DST needs to explore the reasons why firms report such a low take-up of its funding mechanisms.

## To what extent are innovative firms able to secure public sector contracts?

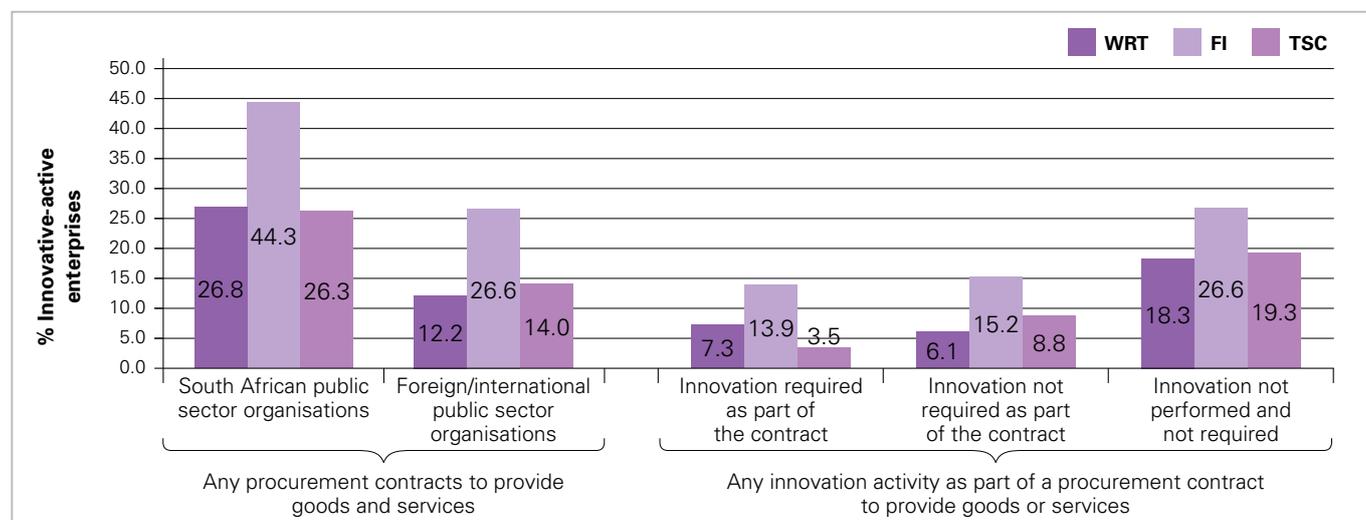
Firms were asked if they had any public procurement contracts to provide goods and services.

Here, too, the FI sector stood out, with 44% reporting that they have contracts from national public organisations, and 27% with international public sector organisations (Figure 2). The pattern in the WRT and TSC firms is virtually the same, but much lower than the FI sector, with around 26% of firms having a national and 12-14% an international contract.

However, these contracts are not very “innovation rich”: only 14% of FI firms reported that innovation was required as part of the contract, 7% of WRT and 3.5% of TSC.

A higher 27% of FI firms, 20% of TSC firms and 18% of WRT firms reported that innovation was not performed nor was it required, as part of the procurement contract.

Figure 2. Innovation-active enterprises with public sector procurement



Source: Moses et al, 2017 (Appendix 4 Table A10.4)



**Policy Implication:** There is considerable scope to introduce new and improve existing interventions that stimulate innovation as part of public procurement contracts.

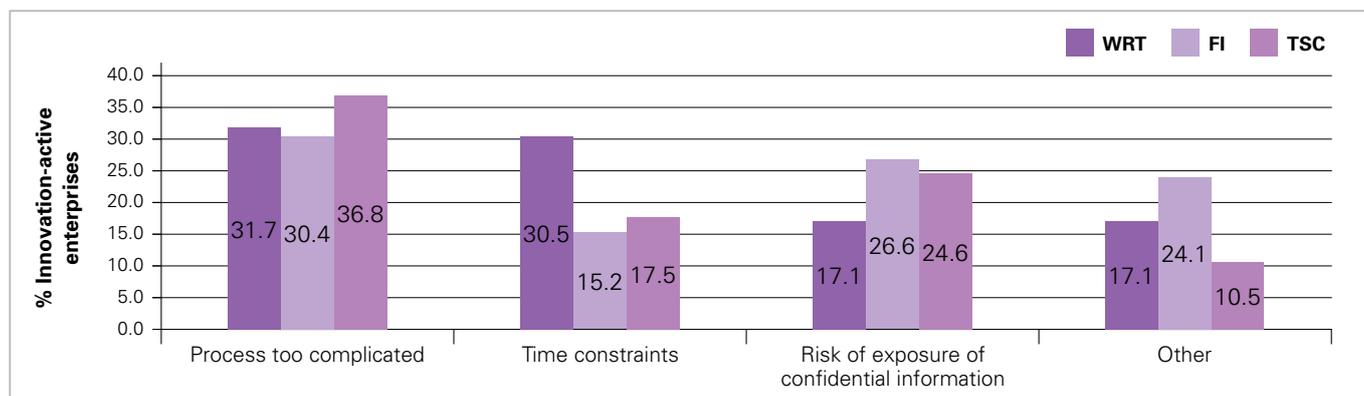
## Why don't firms access government funding?

The big question, of course, is why firms tend not to access government funding for their innovation activities.

To explore this question, the Business Innovation Survey 2010-2012 delivers very useful information. The most significant constraint reported is that the process of application is too complicated: 37% of TSC firms—those who least access government sources—and 30% of WRT and FI firms.

A second constraint, which is exacerbated by complex processes, is time constraints. This was particularly a problem in the WRT sector, pointing to an avenue to expand their participation. Business confidentiality—the risk of exposure of proprietary information—was less of a concern, for around 17% of firms in all three sectors.

Figure 3. Reasons why innovation-active enterprises did not access government funds



Source: Moses et al, 2017 (Appendix 4 Table A10.3)



**Policy Implication:** Administrative application processes need to be streamlined, made more simple, accessible and quick.

## Ideas for policy

1

Advocacy and communication needs to be more widespread, but equally, more effectively oriented to firms interests, and targeted to specific economic sectoral needs.

2

The reasons why firms do not access existing funding mechanisms need to be explored more fully, to inform more effective interventions targeted to specific sectoral needs.

3

Public procurement processes should be interrogated to explore possibilities to introduce new mechanisms, and to improve existing interventions that can stimulate innovation as a contractual requirement. Such processes need to bear in mind sectoral differences, and that an innovation requirement may not be appropriate for all sectors and all contracts.

4

Ease and speed of administrative application processes need to be improved, which could be through effective and simple online processes.

## References

- Bolton, P. 2016. Public Procurement as a Tool to Drive Innovation in South Africa. *PER / PELJ* 2016(19) Available from: <https://goo.gl/CGTZpt>
- Moses, C., Sithole, M., Makelane, H., Mudavanhu, P. & Kupamupindi, T. 2017. Innovation in Selected South African Services Sectors, 2010-2012. A micro-data report based on the 2010-2012 South African Business Innovation Survey undertaken by the Centre for Science, Technology and Innovation Indicator for the Department of Science and Technology. Available from: <https://goo.gl/2D1qzc>

## About the Series

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This Research Brief was first published in April 2018.

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