Howard PARTNERS
Howard Partners Pty Ltd ACN 090 817 369

Performance Review of Australia's Rural Innovation System

Results of the Expert Option Survey

May 2018

188 responses

(response rate 31 per cent)

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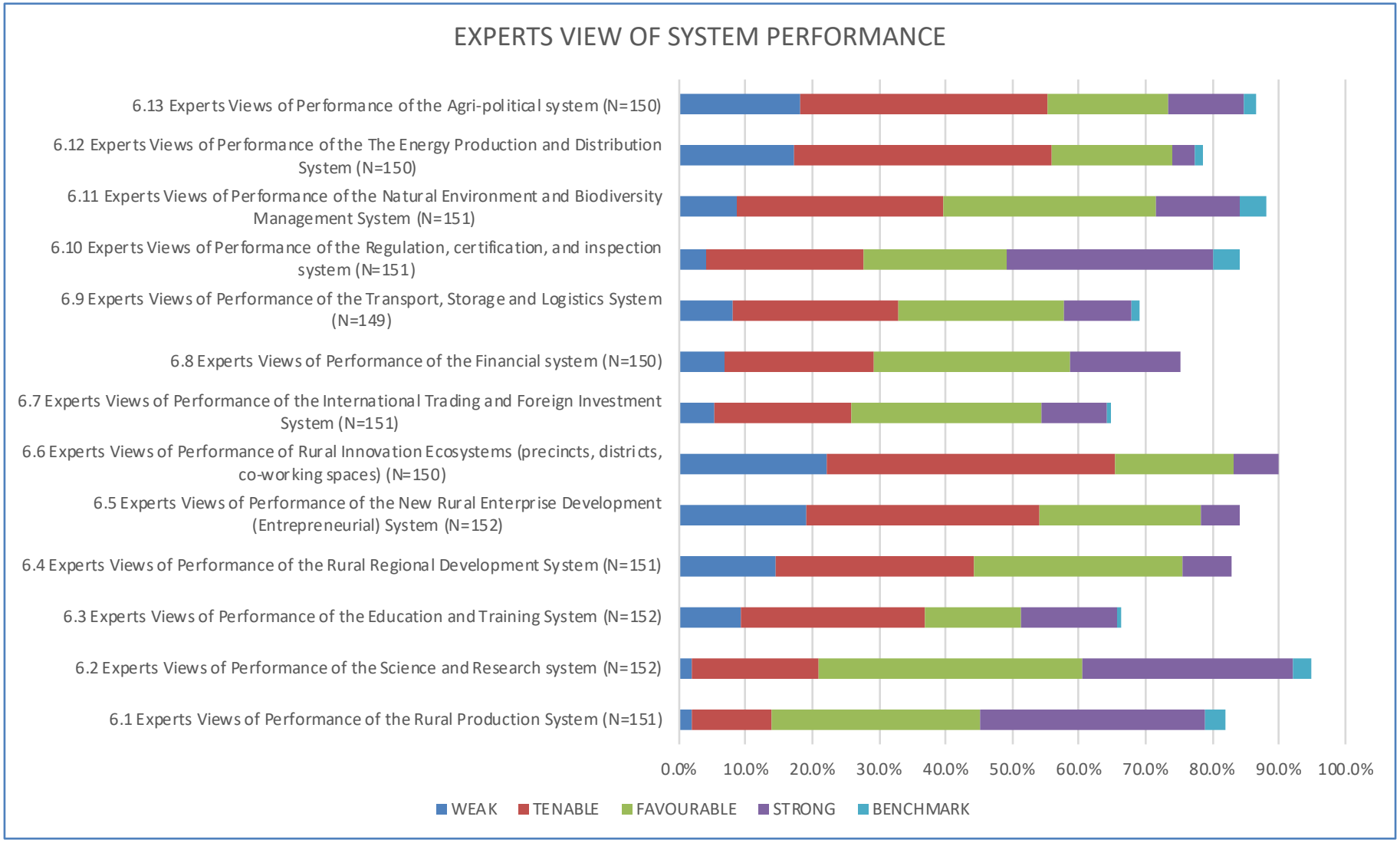
PERSPECTIVES ON SYSTEM PERFORMANCE


EXPERTS VIEW OF SYSTEM PERFORMANCE
6.13 Experts Views of Performance of the Agri-political system (N=150)
6.12 Experts Views of Performance of the The Energy Production and Distribution System (N=150)
6.11 Experts Views of Performance of the Natural Environment and Biodiversity Management System (N=151)
6.10 Experts Views of Performance of the Regulation, certification, and inspection system (N=151)
6.9 Experts Views of Performance of the Transport, Storage and Logistics System (N=149)
6.8 Experts Views of Performance of the Financial system (N=150)
6.7 Experts Views of Performance of the International Trading and Foreign Investment System (N=151)
6.6 Experts Views of Performance of Rural Innovation Ecosystems (precincts, districts, co-working spaces) (N=150)
6.5 Experts Views of Performance of the New Rural Enterprise Development (Entrepreneurial) System (N=152)
6.4 Experts Views of Performance of the Rural Regional Development System (N=151)
6.3 Experts Views of Performance of the Education and Training System (N=152)
6.2 Experts Views of Performance of the Science and Research system (N=152)
6.1 Experts Views of Performance of the Rural Production System (N=151)
0.0% 10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0% 80.0% 90.0% 100.0%
WEAK
TENABLE
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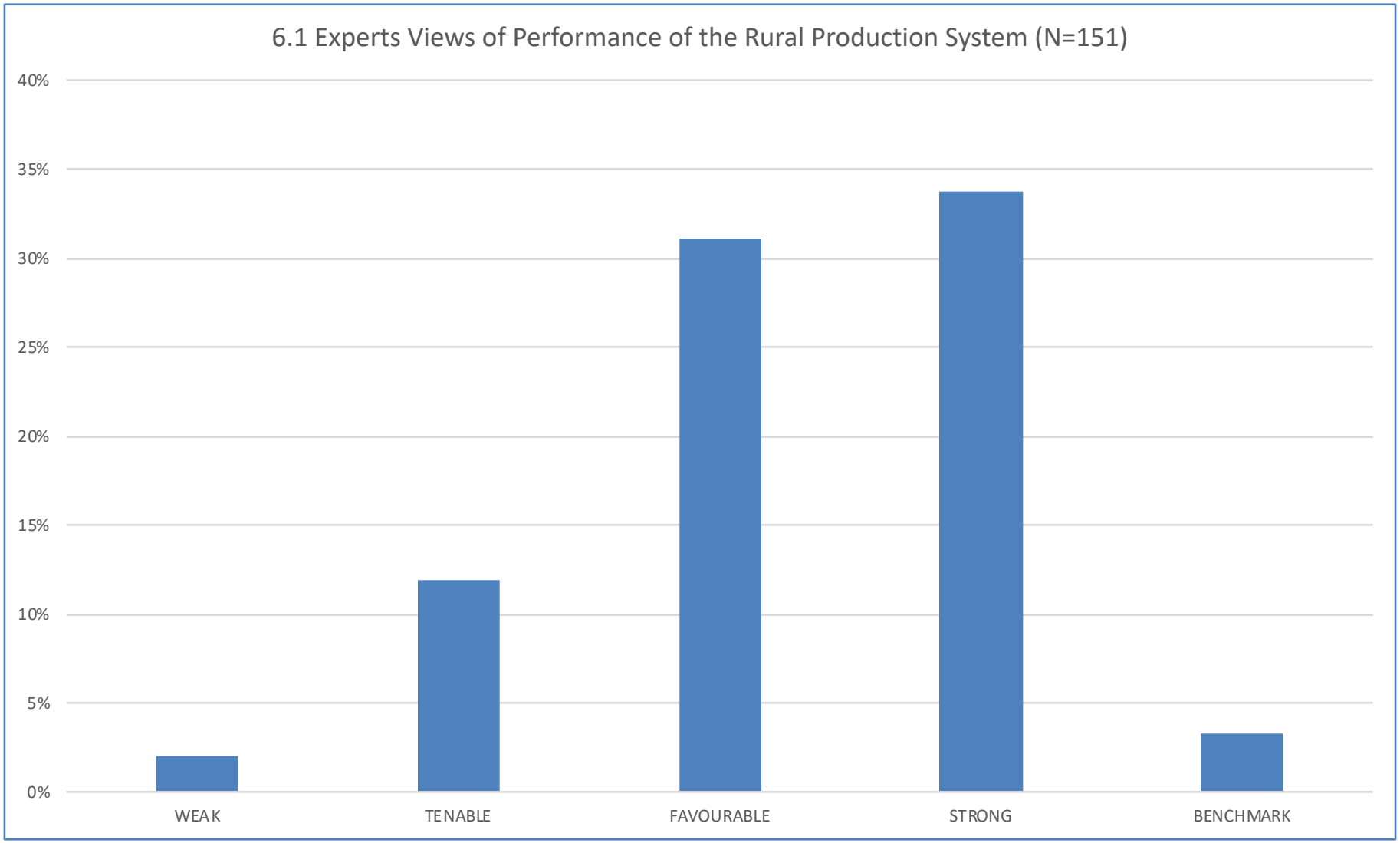
STRONG
BENCHMARK


6.1 Experts Views of Performance of the Rural Production System (N=151)
40%
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WEAK
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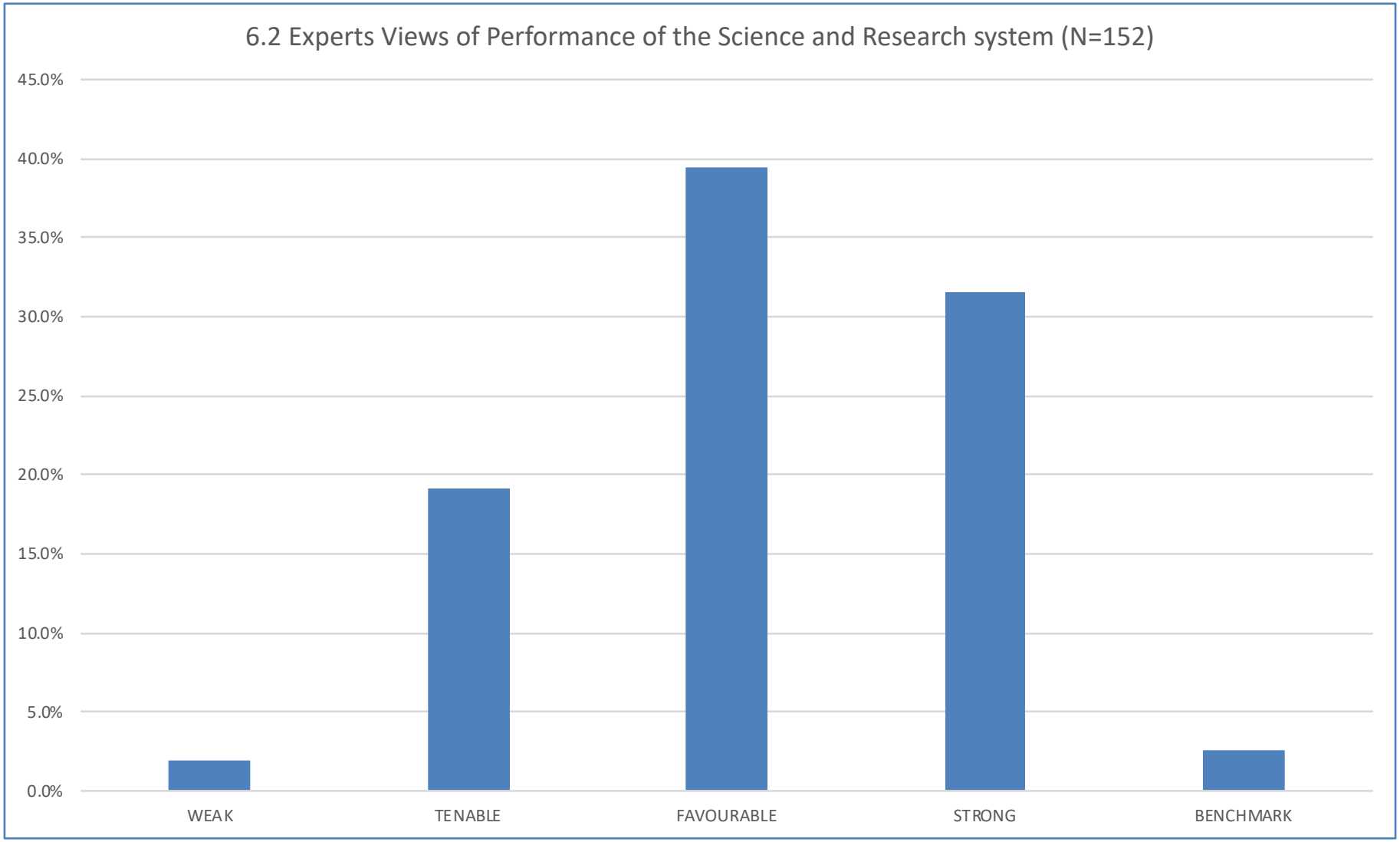
6.2 Experts Views of Performance of the Science and Research system (N=152)
45.0%
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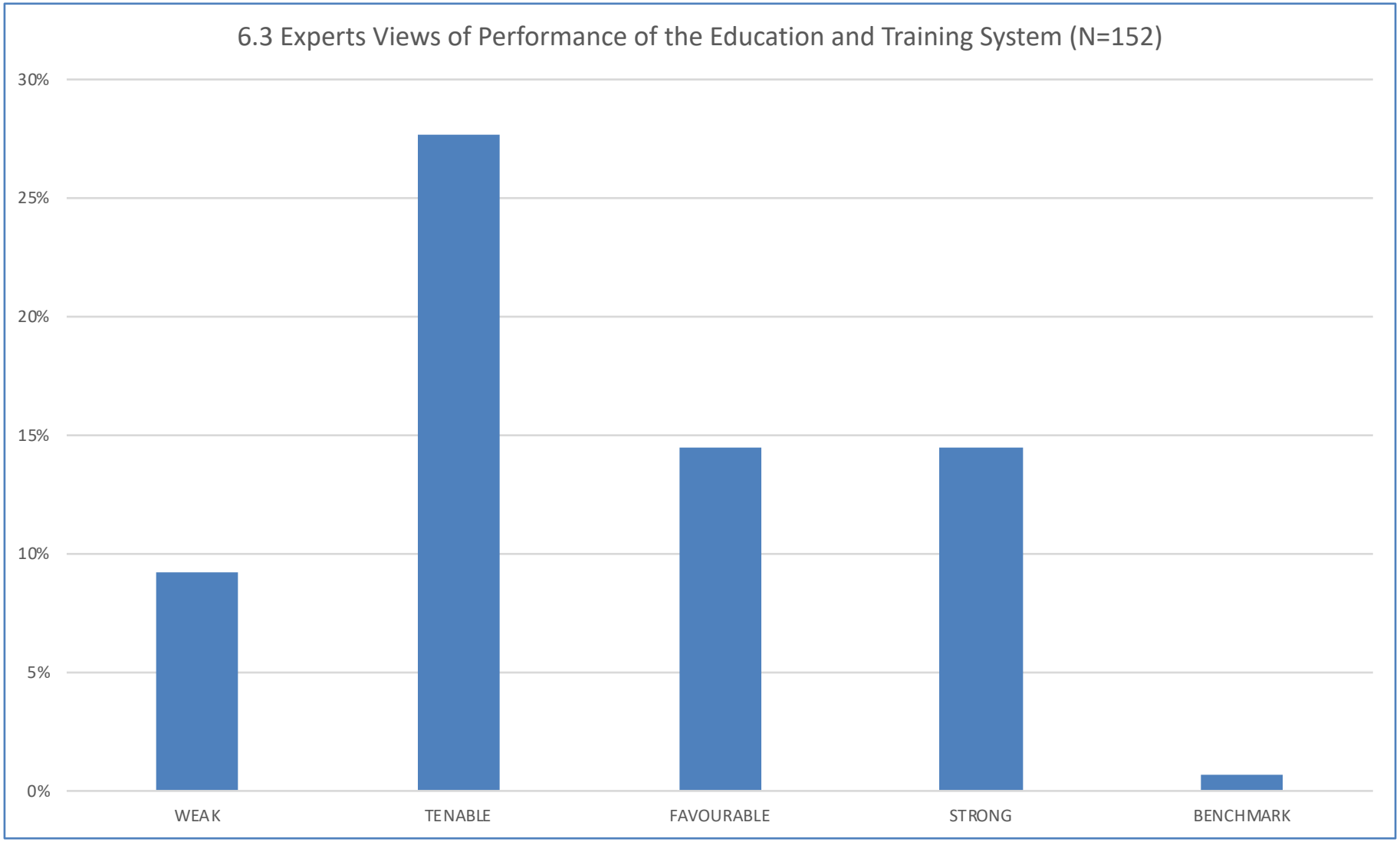
6.3 Experts Views of Performance of the Education and Training System (N=152)
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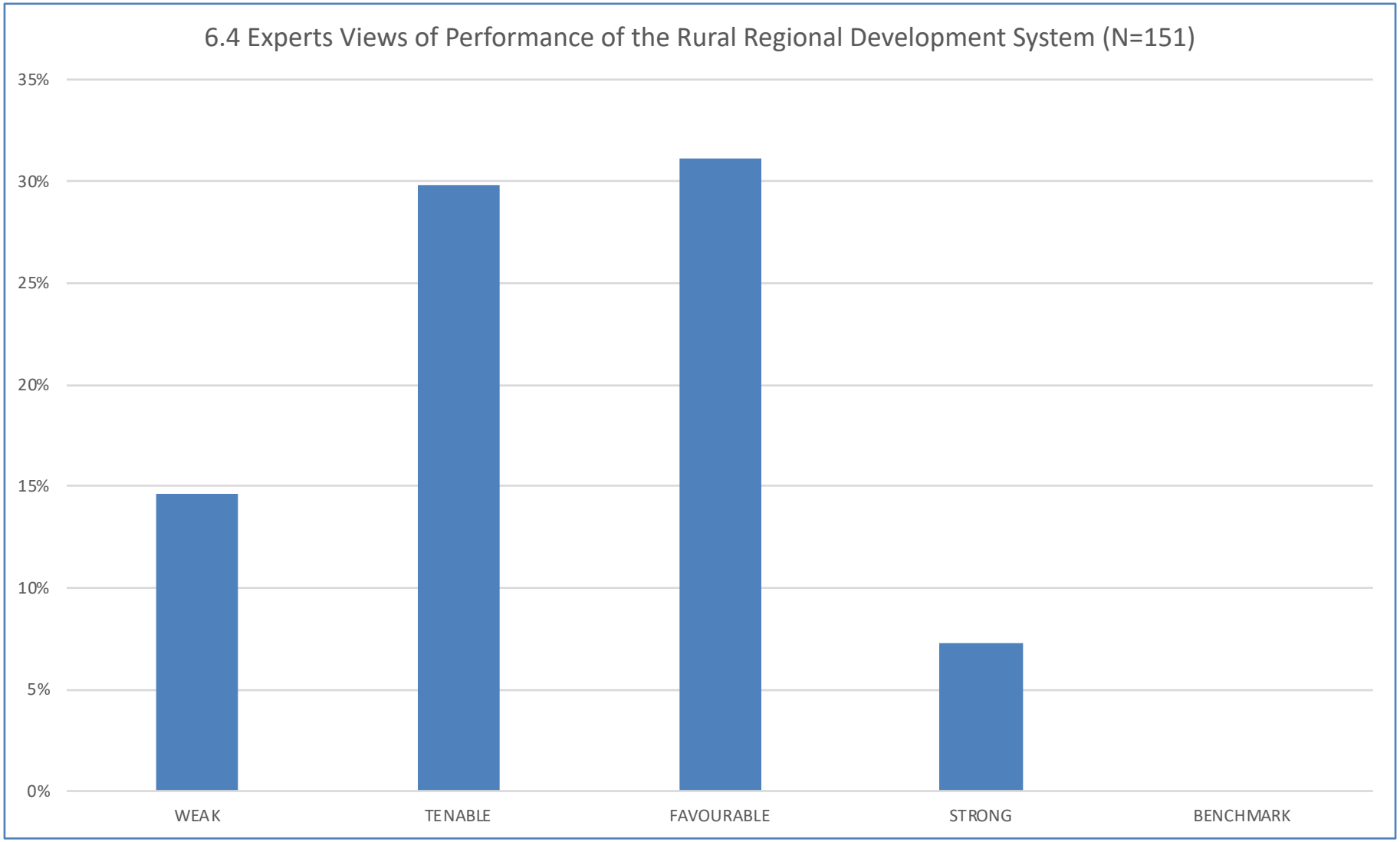
6.4 Experts Views of Performance of the Rural Regional Development System (N=151)
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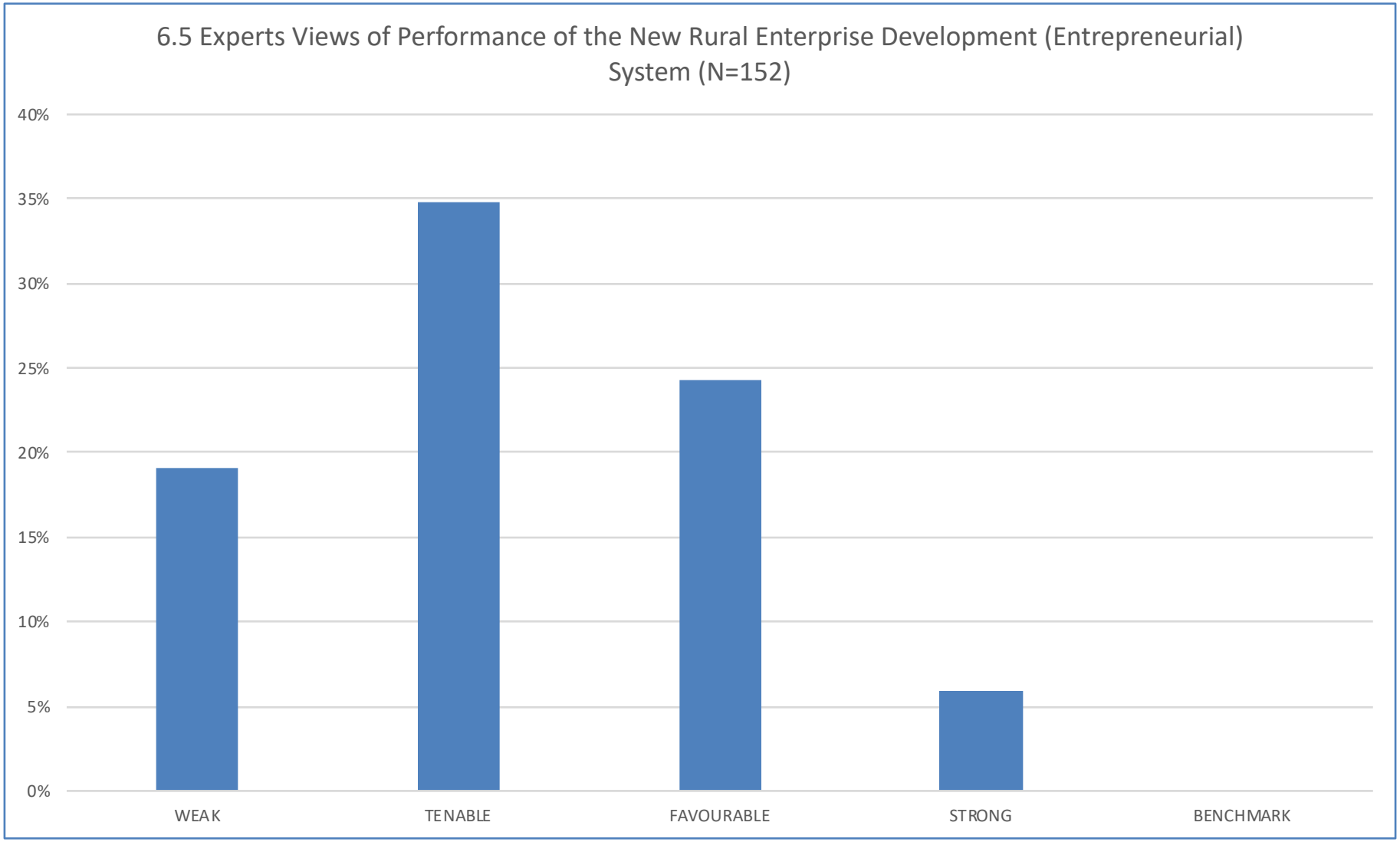
6.5 Experts Views of Performance of the New Rural Enterprise Development (Entrepreneurial) System (N=152)
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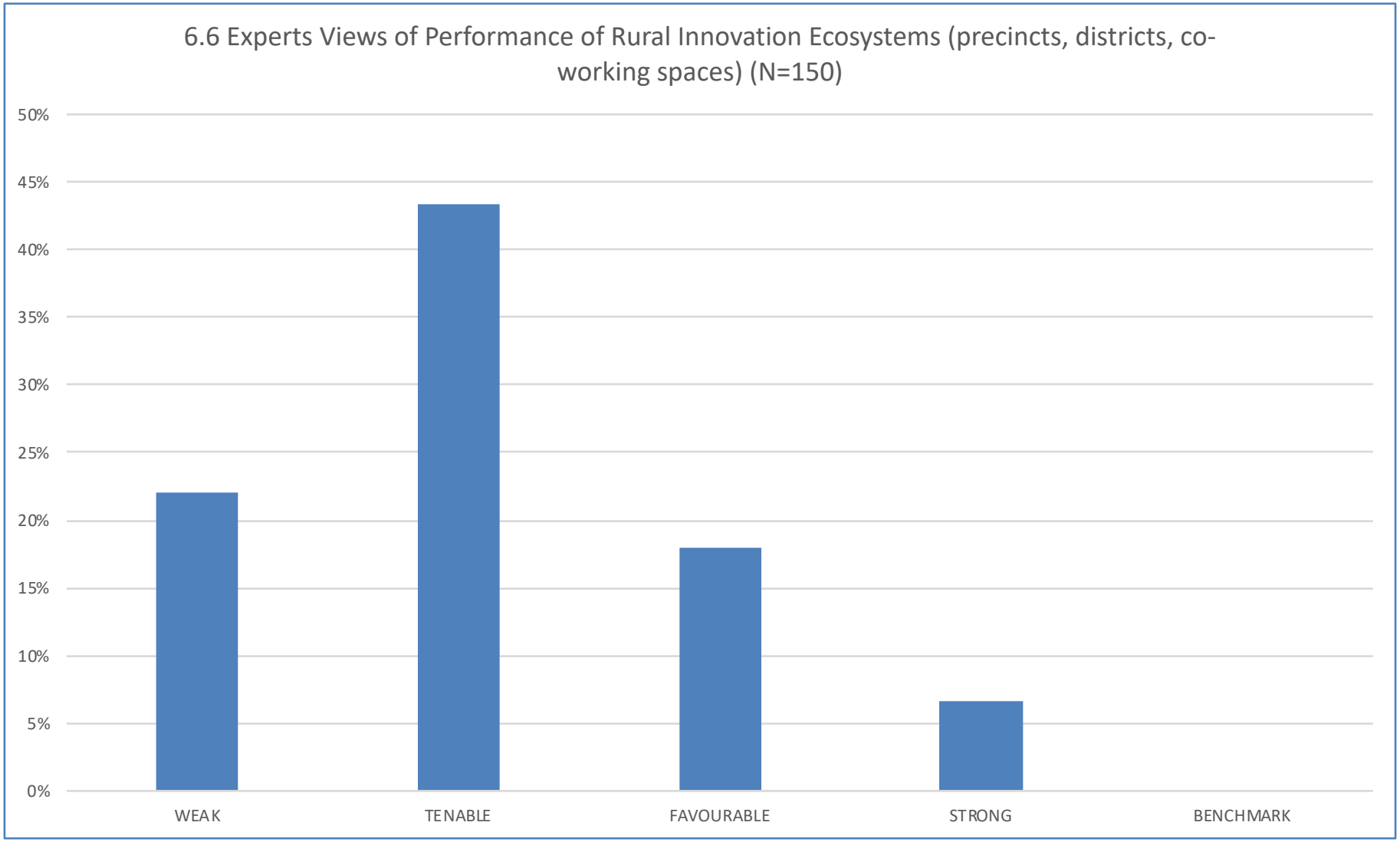
6.6 Experts Views of Performance of Rural Innovation Ecosystems (precincts, districts, co-working spaces) (N=150)
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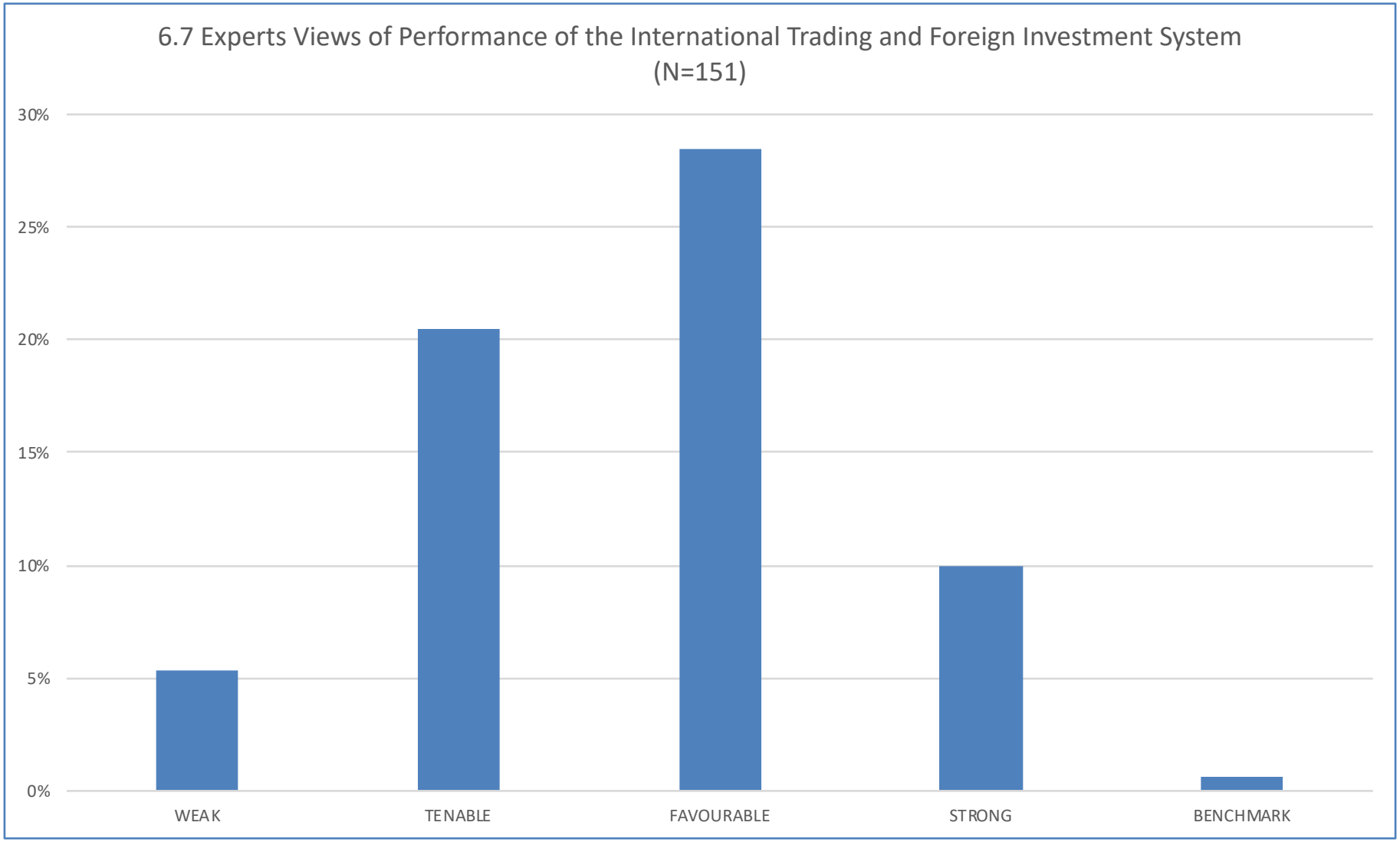
6.7 Experts Views of Performance of the International Trading and Foreign Investment System
(N=151)
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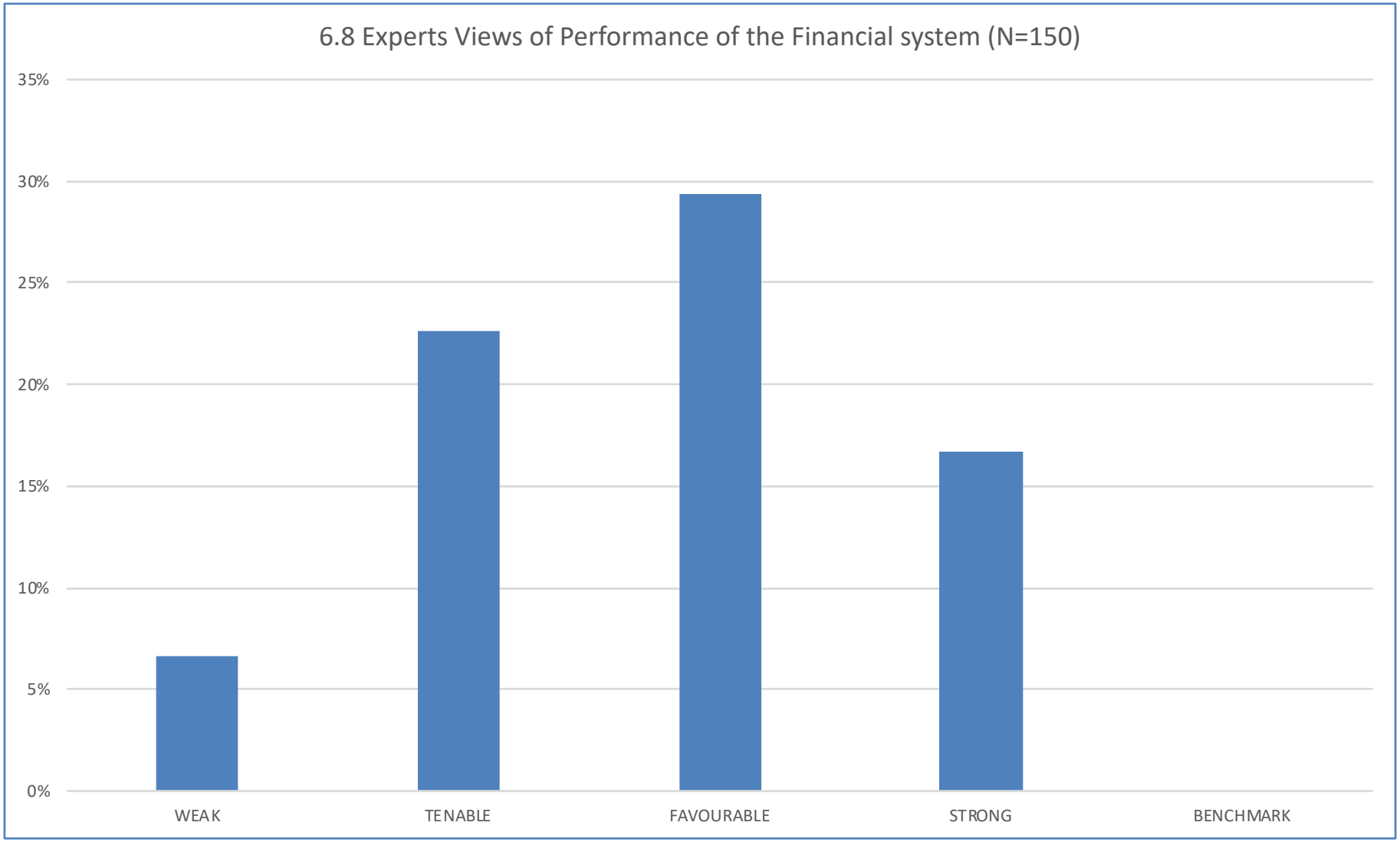
6.8 Experts Views of Performance of the Financial system (N=150)
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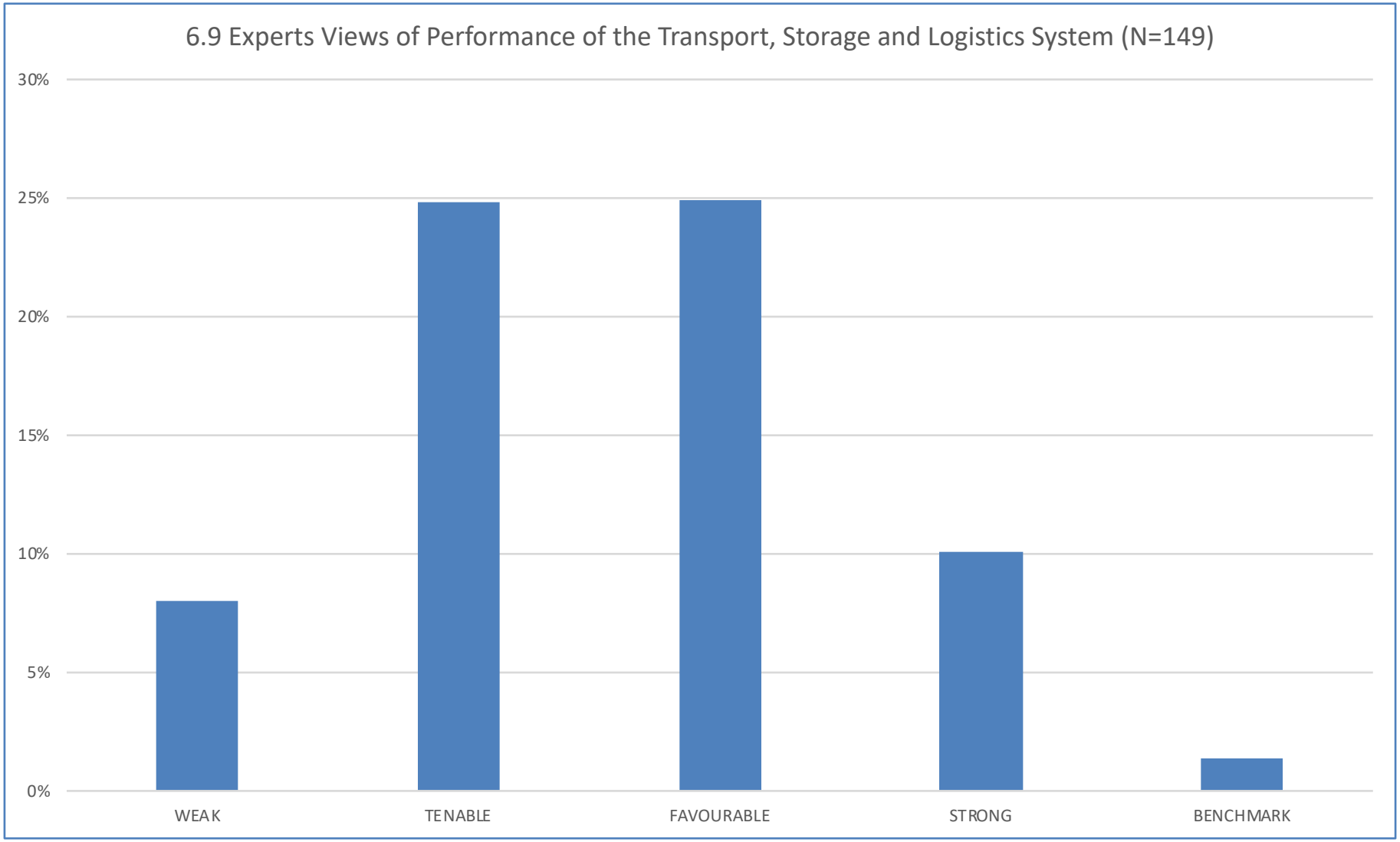
6.9 Experts Views of Performance of the Transport, Storage and Logistics System (N=149)
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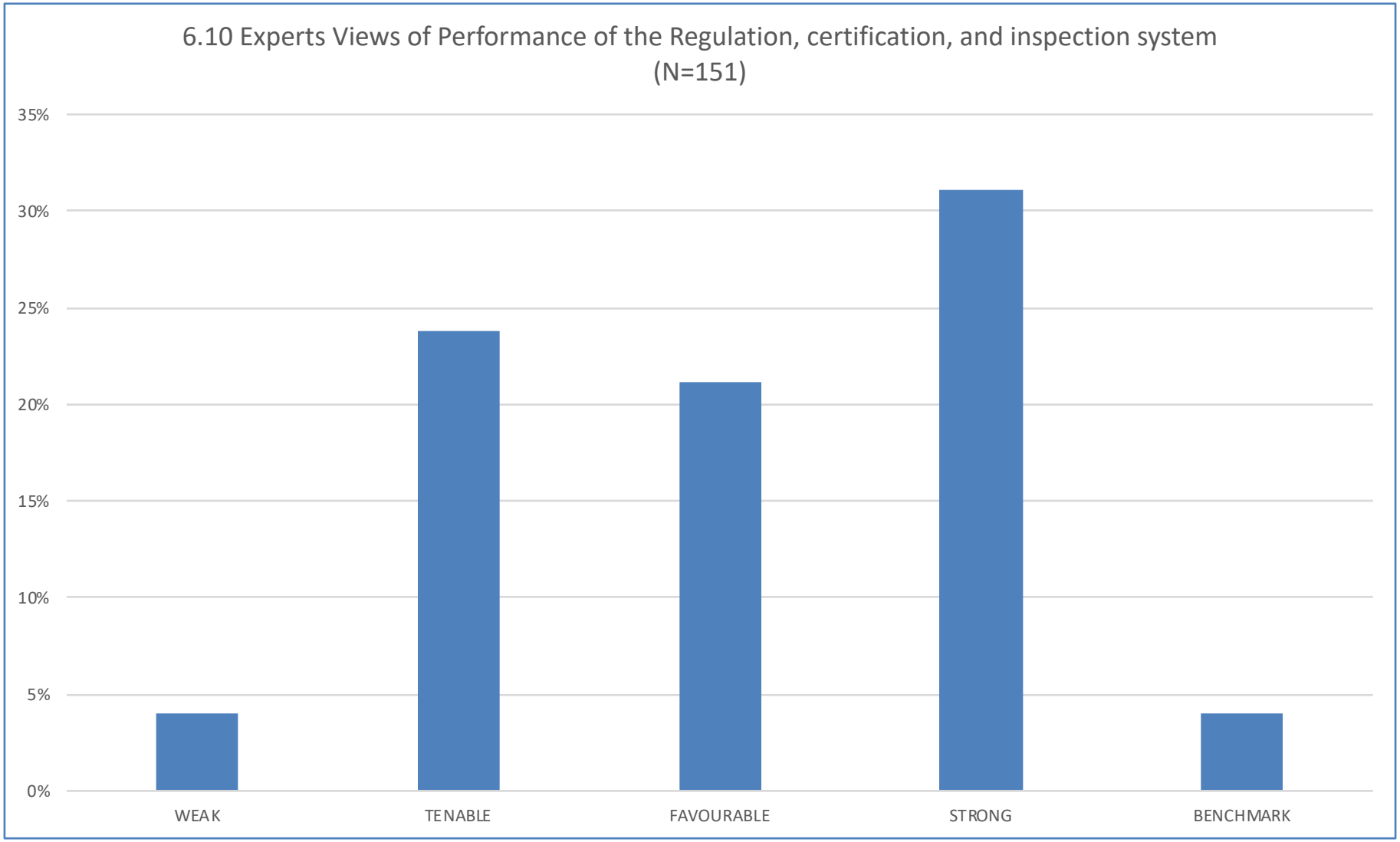
6.10 Experts Views of Performance of the Regulation, certification, and inspection system
(N=151)
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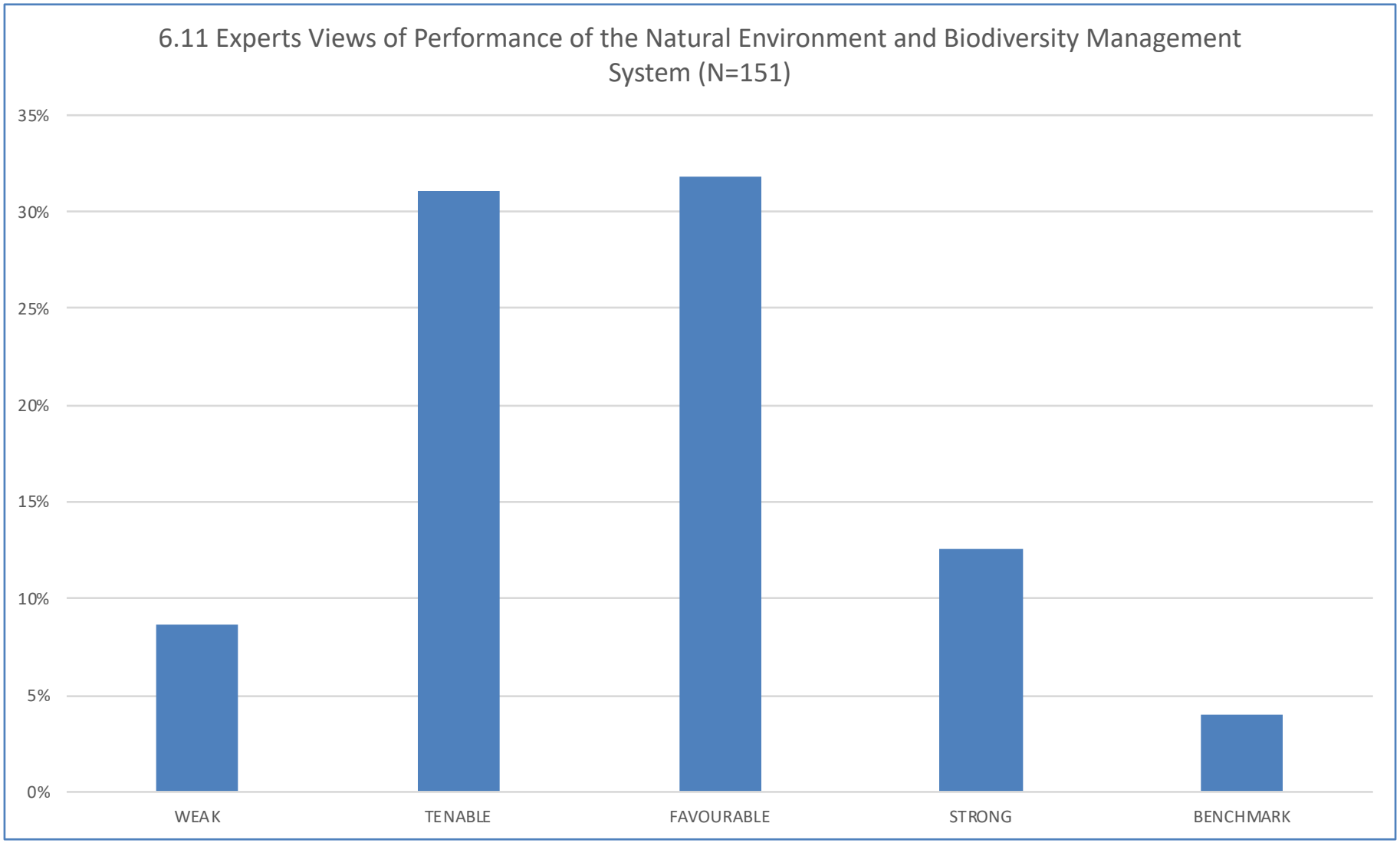
6.11 Experts Views of Performance of the Natural Environment and Biodiversity Management System (N=151)
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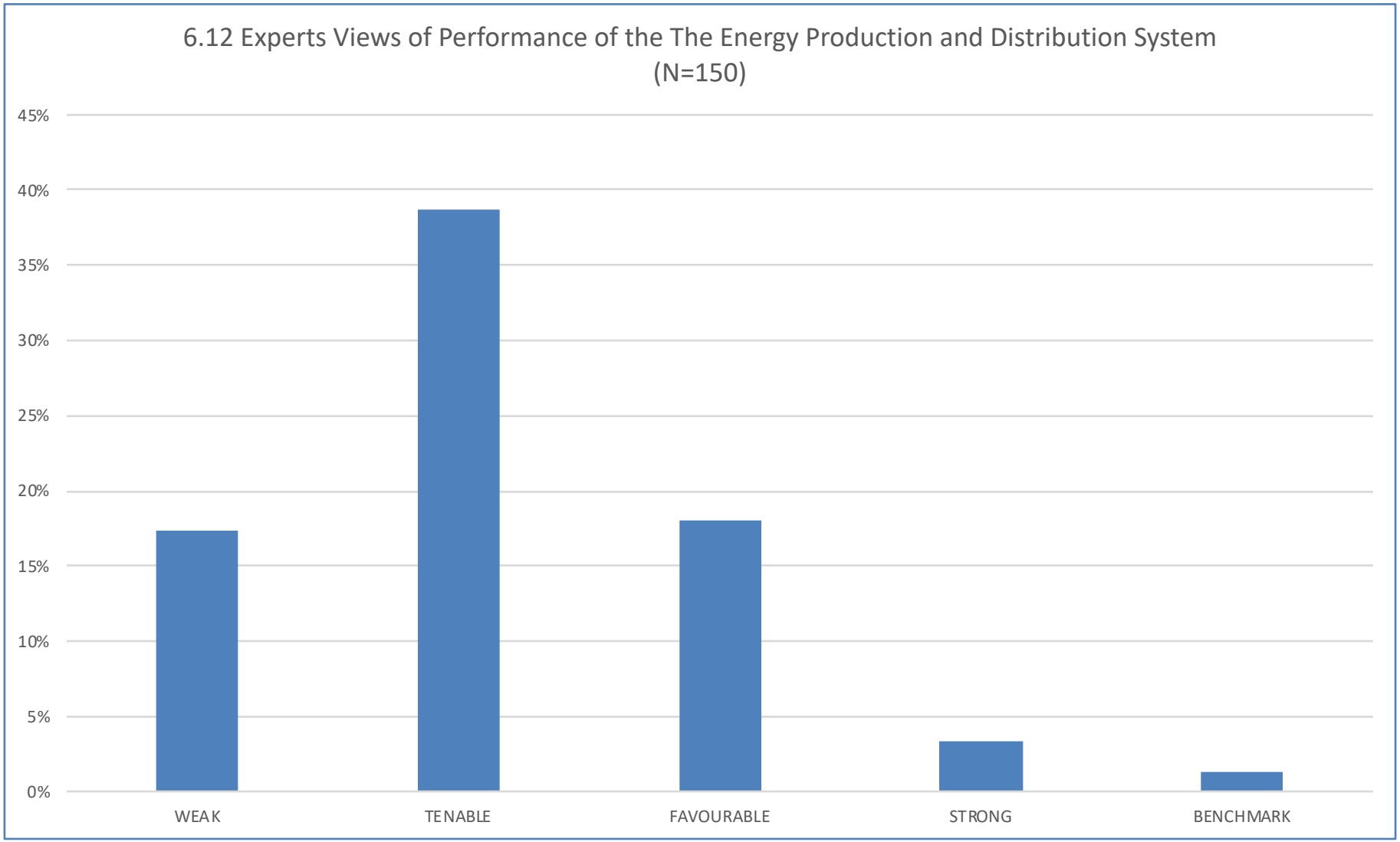
6.12 Experts Views of Performance of the The Energy Production and Distribution System
(N=150)
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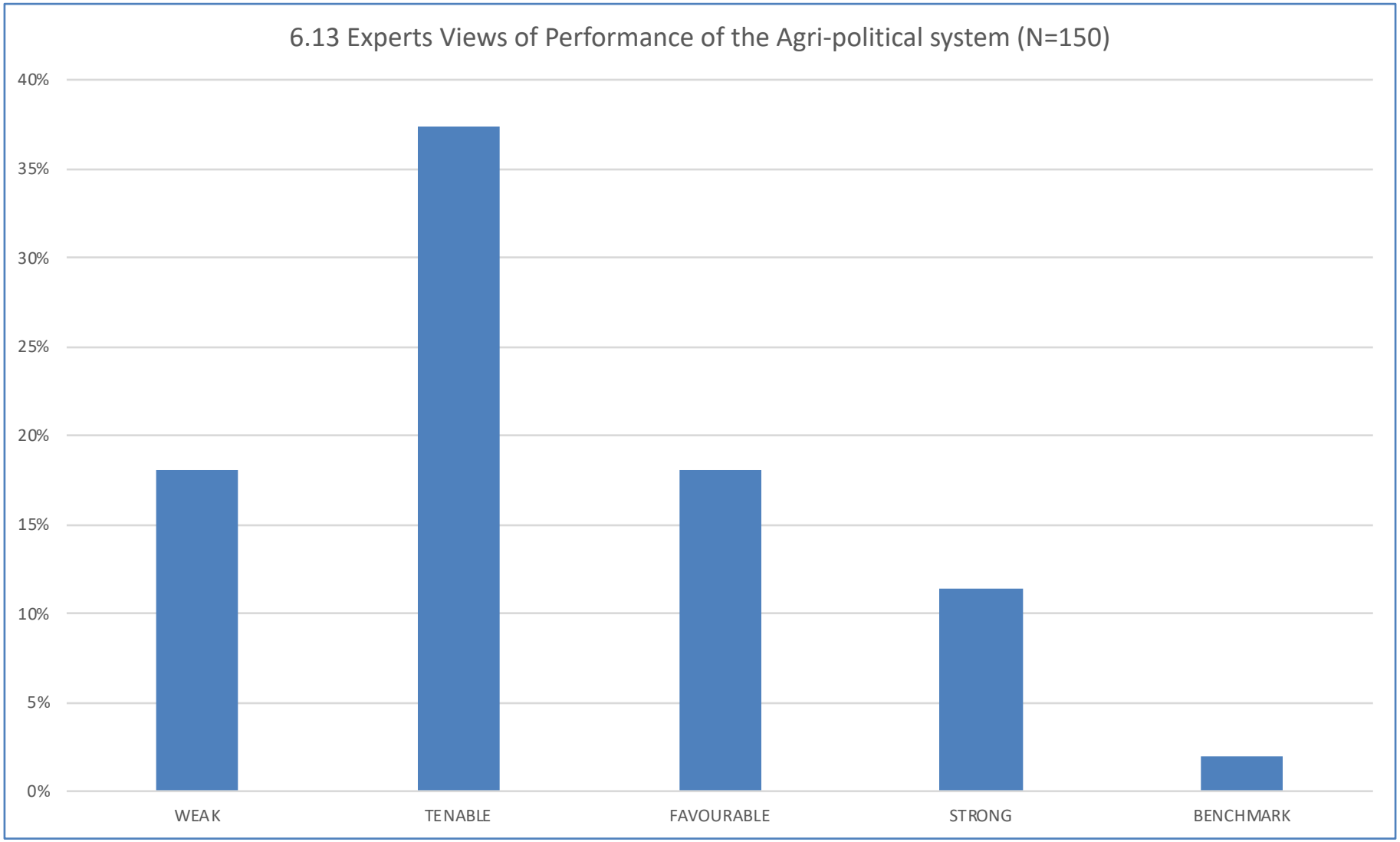
6.13 Experts Views of Performance of the Agri-political system (N=150)
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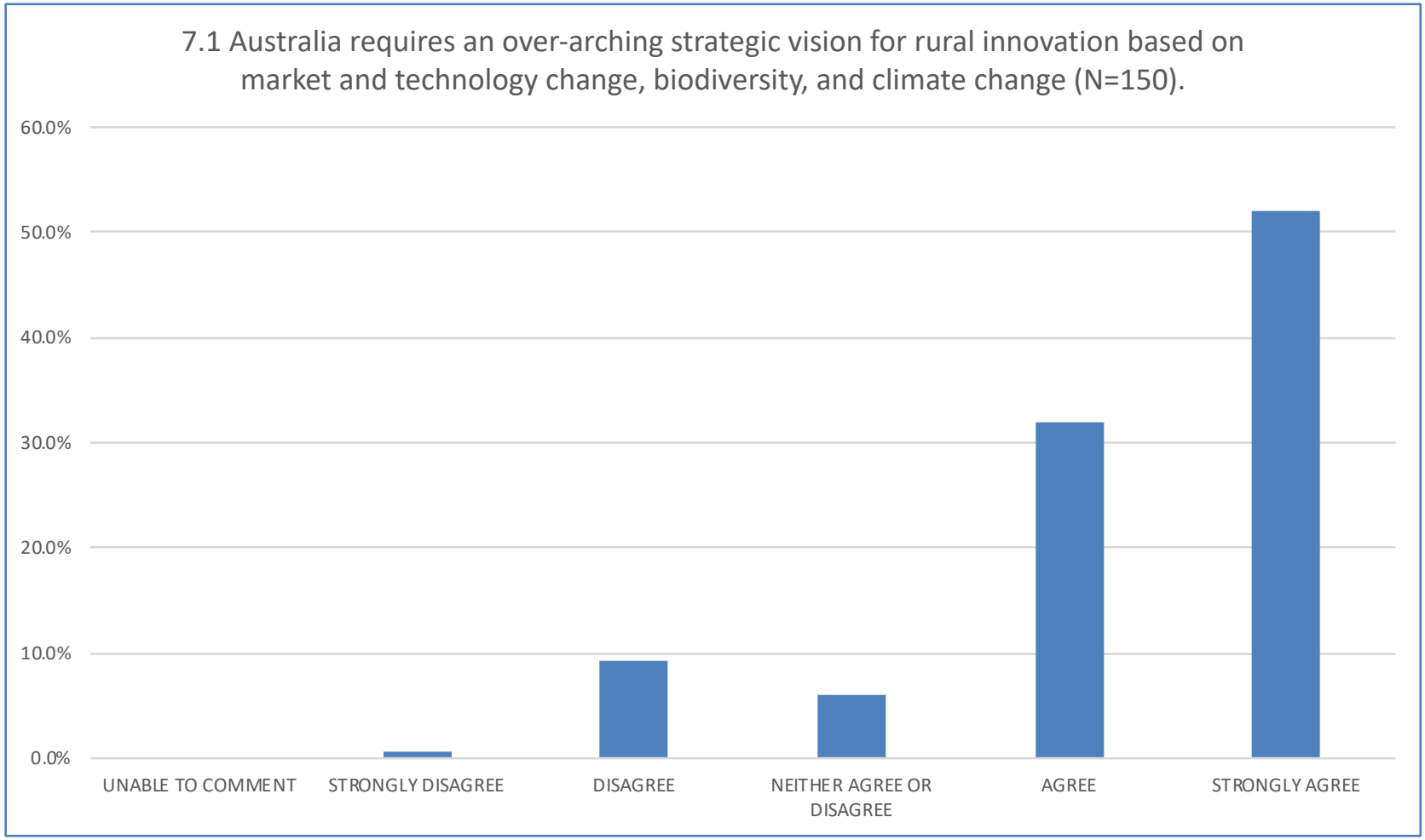
Howard Partners Pty Ltd ACN 090 817 369

STRATEGIES AND DIRECTIONS


7.1 Australia requires an over-arching strategic vision for rural innovation based on market and technology change, biodiversity, and climate change (N=150).
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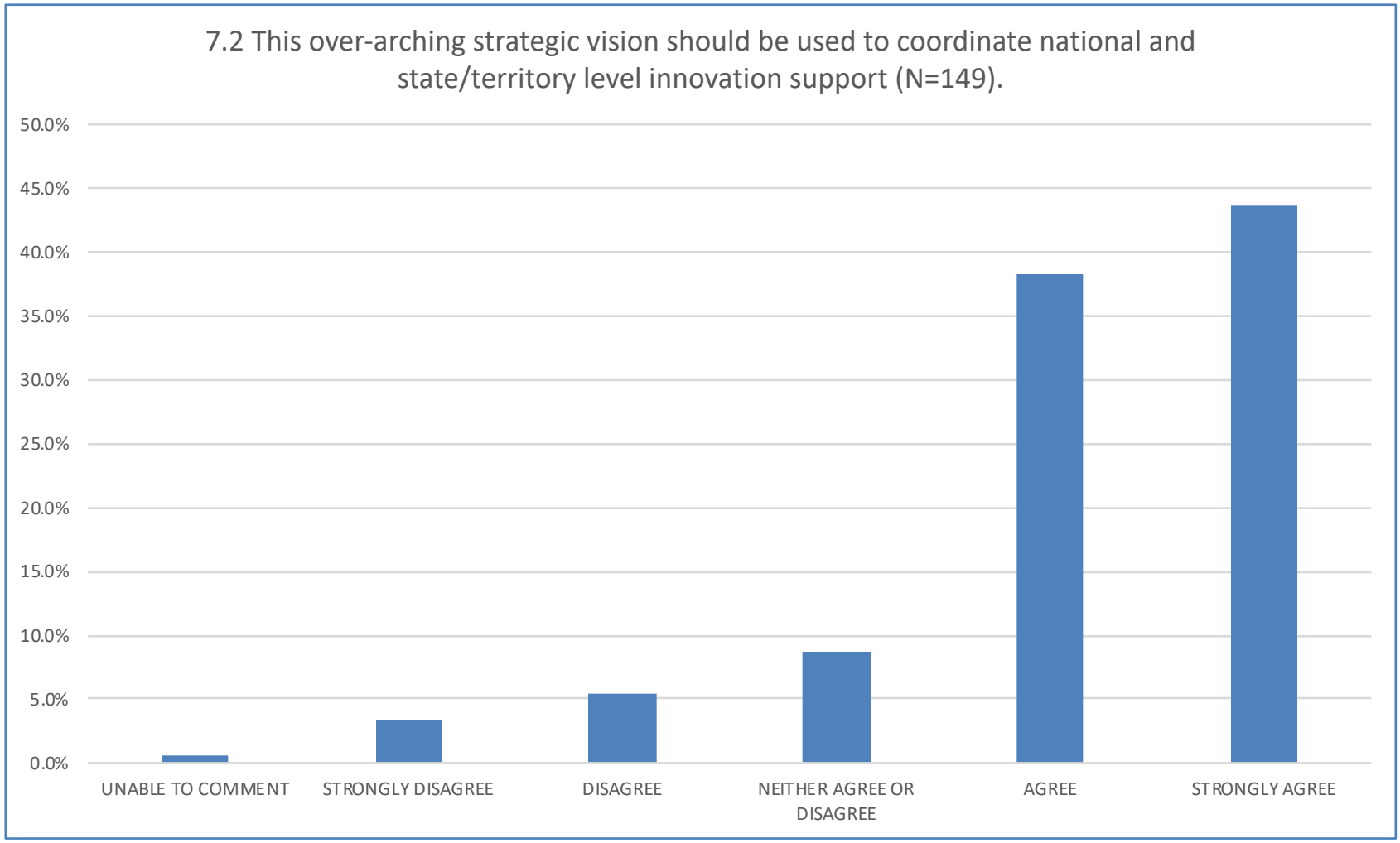
7.2 This over-arching strategic vision should be used to coordinate national and state/territory level innovation support (N=149).
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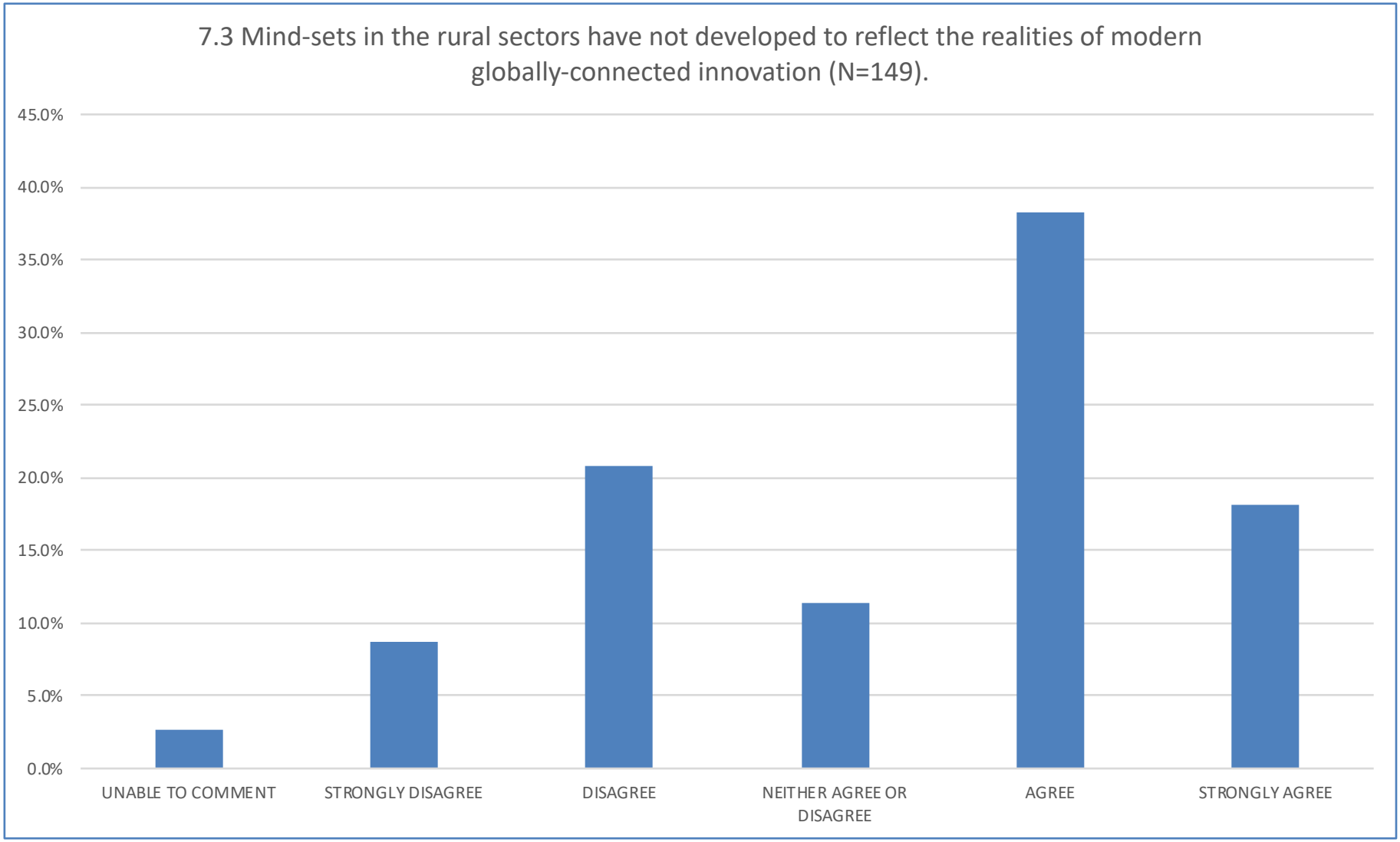
7.3 Mind-sets in the rural sectors have not developed to reflect the realities of modern globally-connected innovation (N=149).
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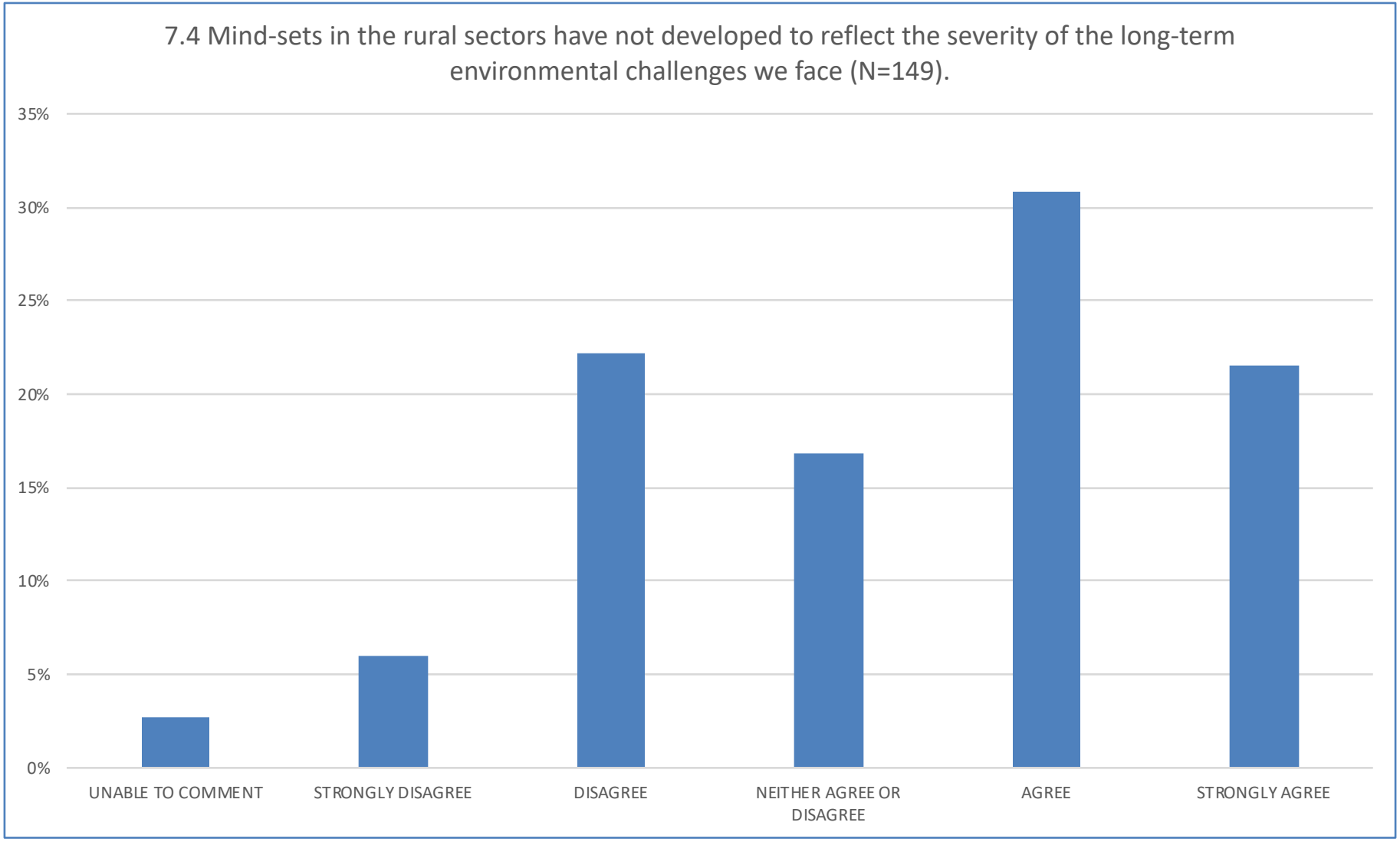
7.4 Mind-sets in the rural sectors have not developed to reflect the severity of the long-term environmental challenges we face (N=149).
35%
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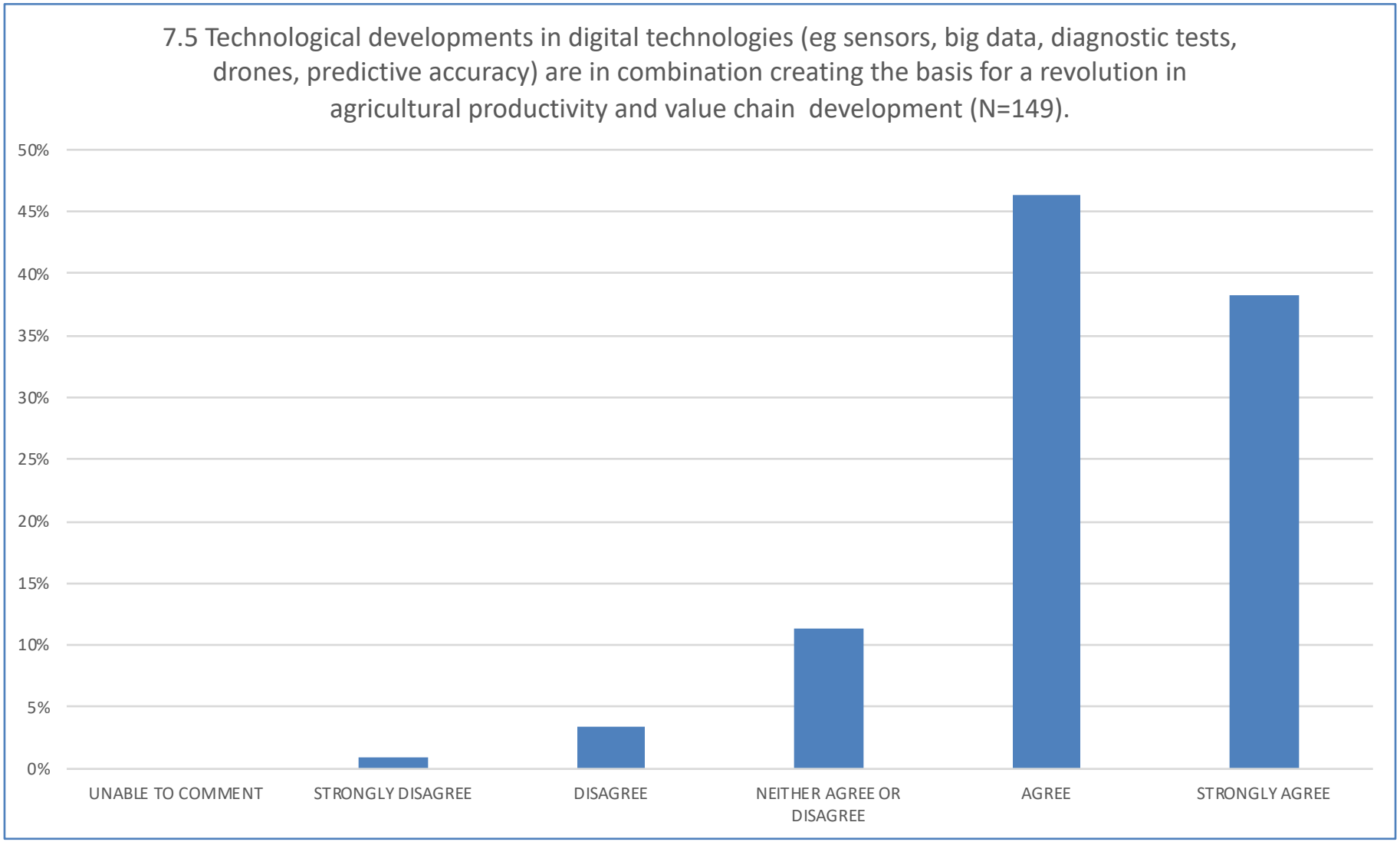
7.5 Technological developments in digital technologies (eg sensors, big data, diagnostic tests, drones, predictive accuracy) are in combination creating the basis for a revolution in agricultural productivity and value chain development (N=149).
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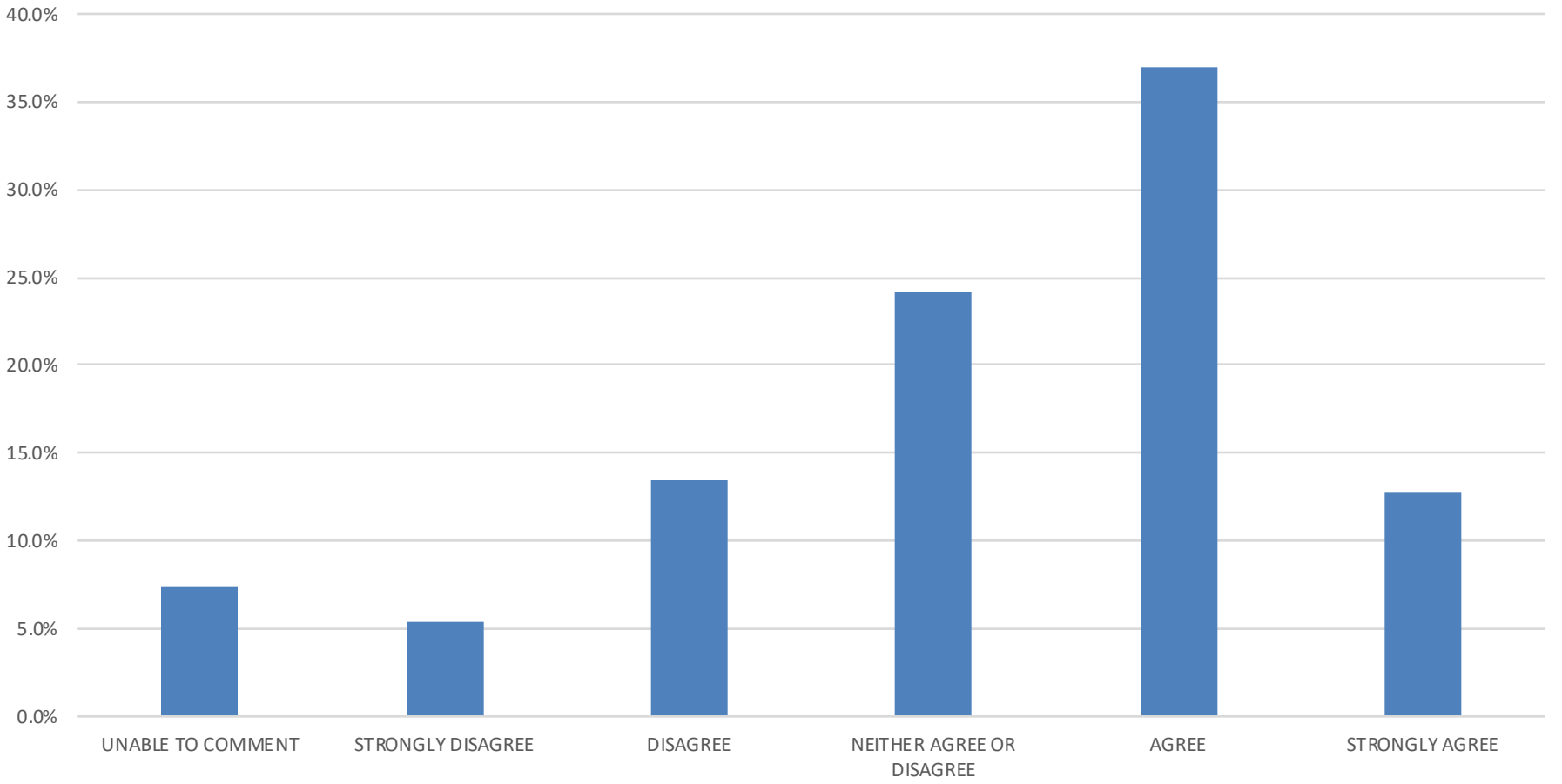
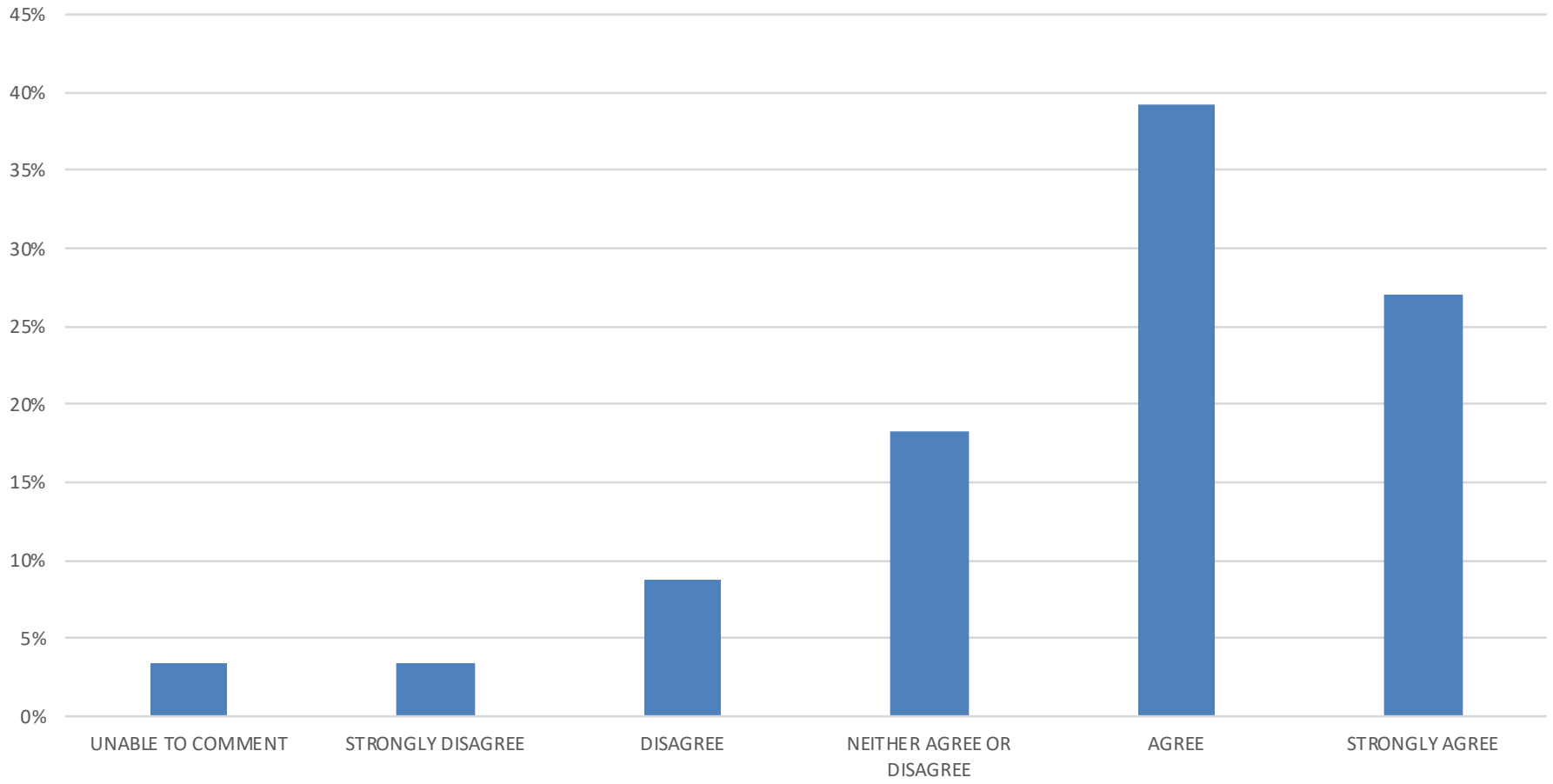
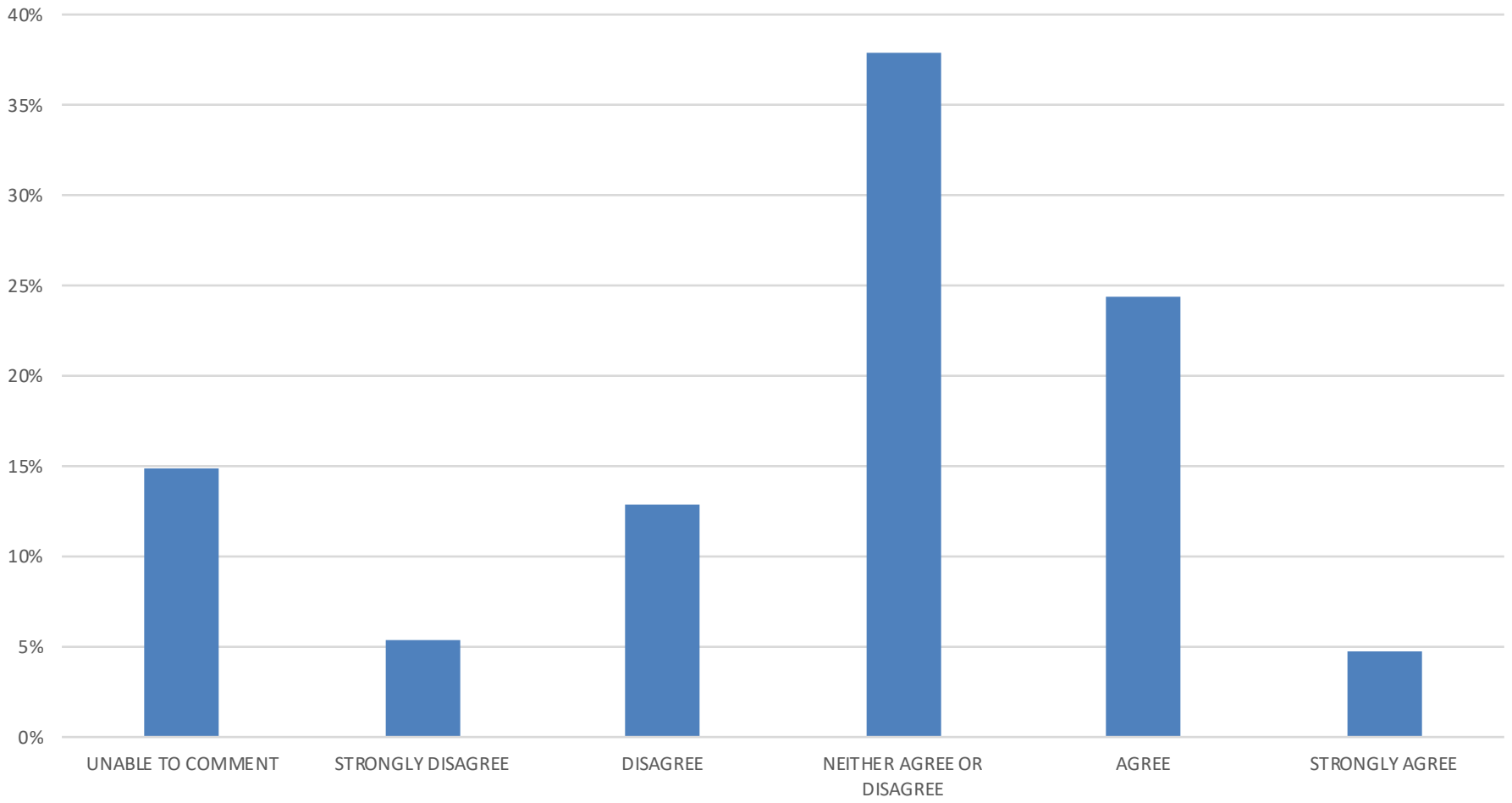
7.6 There is an imbalance between the emphasis on support for R&D and technology development, relative to more general competitive capabilities such as strategic market intelligence and global value chain positioning (N=148).



7.7 Present government policy places too great an emphasis on 'here and now' productivity and efficiency challenges in existing rural industries, and insufficient emphasis on new market and industry-shaping opportunities to exploit longer-term (N=148).



7.8 From an innovation perspective, there is an imbalance between the emphasis placed on the edible versus the non-edible segments of rural industry value chains (N=148).



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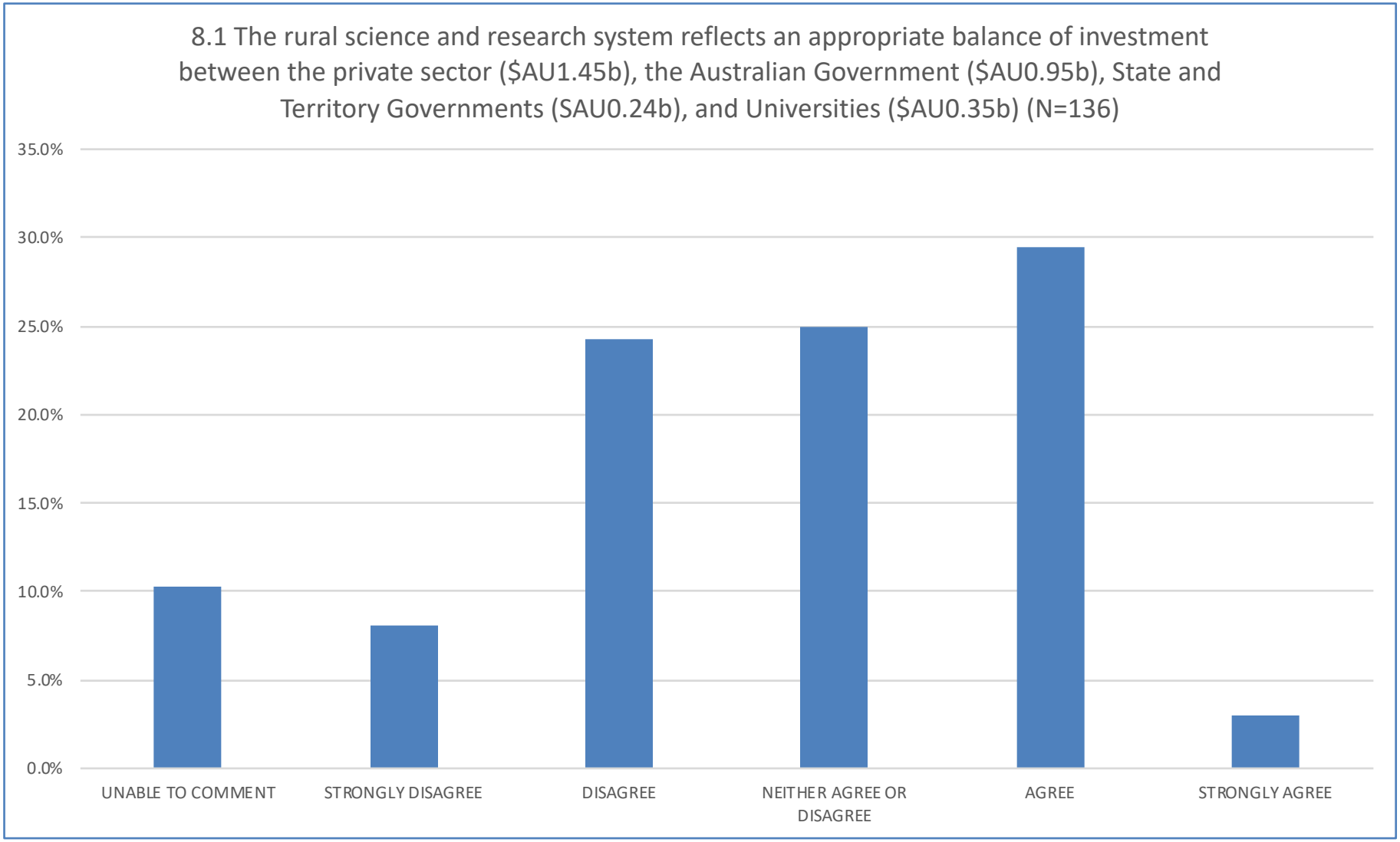
THE SCIENCE AND RESEARCH SYSTEM


8.1 The rural science and research system reflects an appropriate balance of investment between the private sector ($AU1.45b), the Australian Government ($AU0.95b), State and Territory Governments (SAU0.24b), and Universities ($AU0.35b) (N=136)
35.0%
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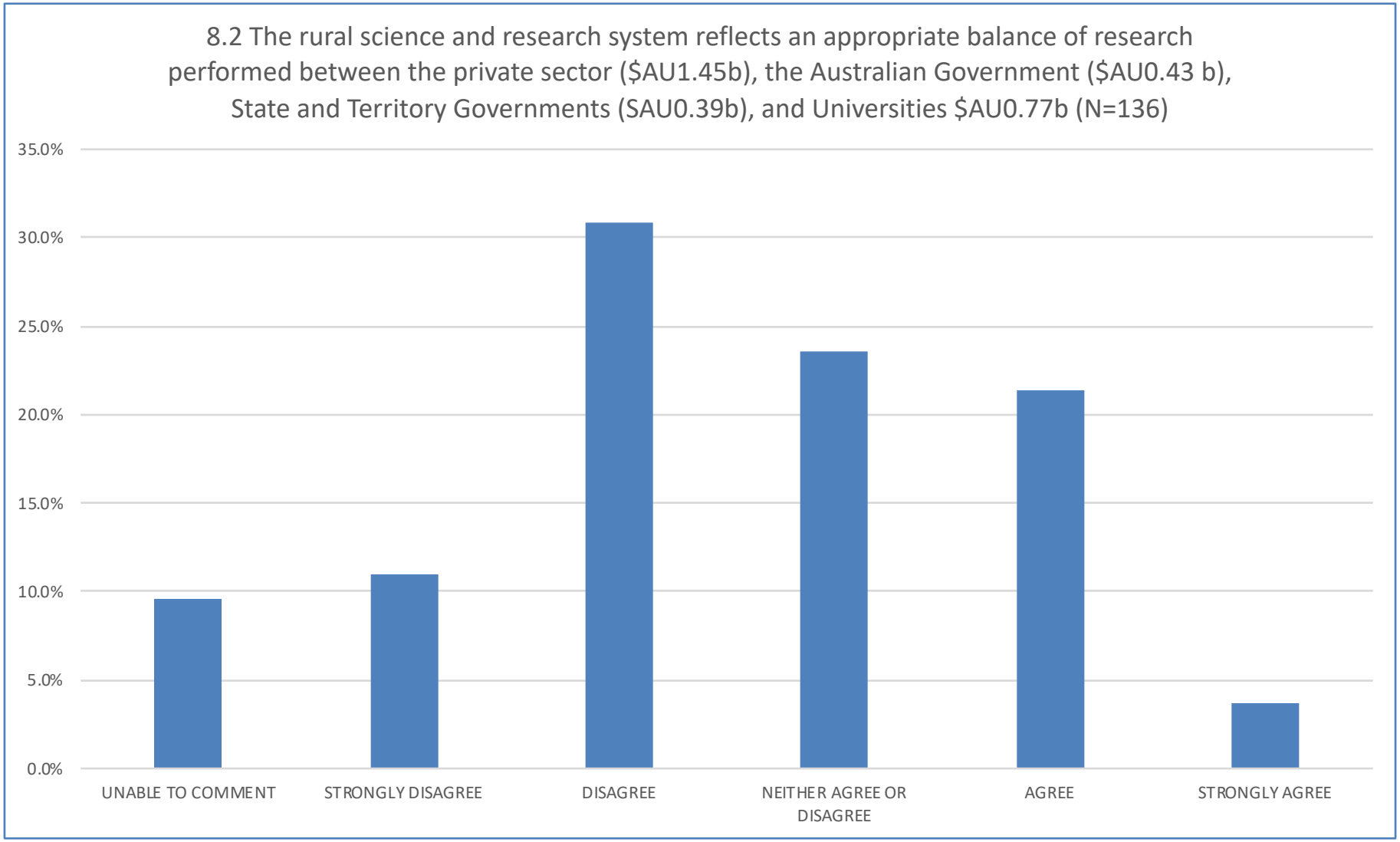
8.2 The rural science and research system reflects an appropriate balance of research performed between the private sector ($AU1.45b), the Australian Government ($AU0.43 b), State and Territory Governments (SAU0.39b), and Universities $AU0.77b (N=136)
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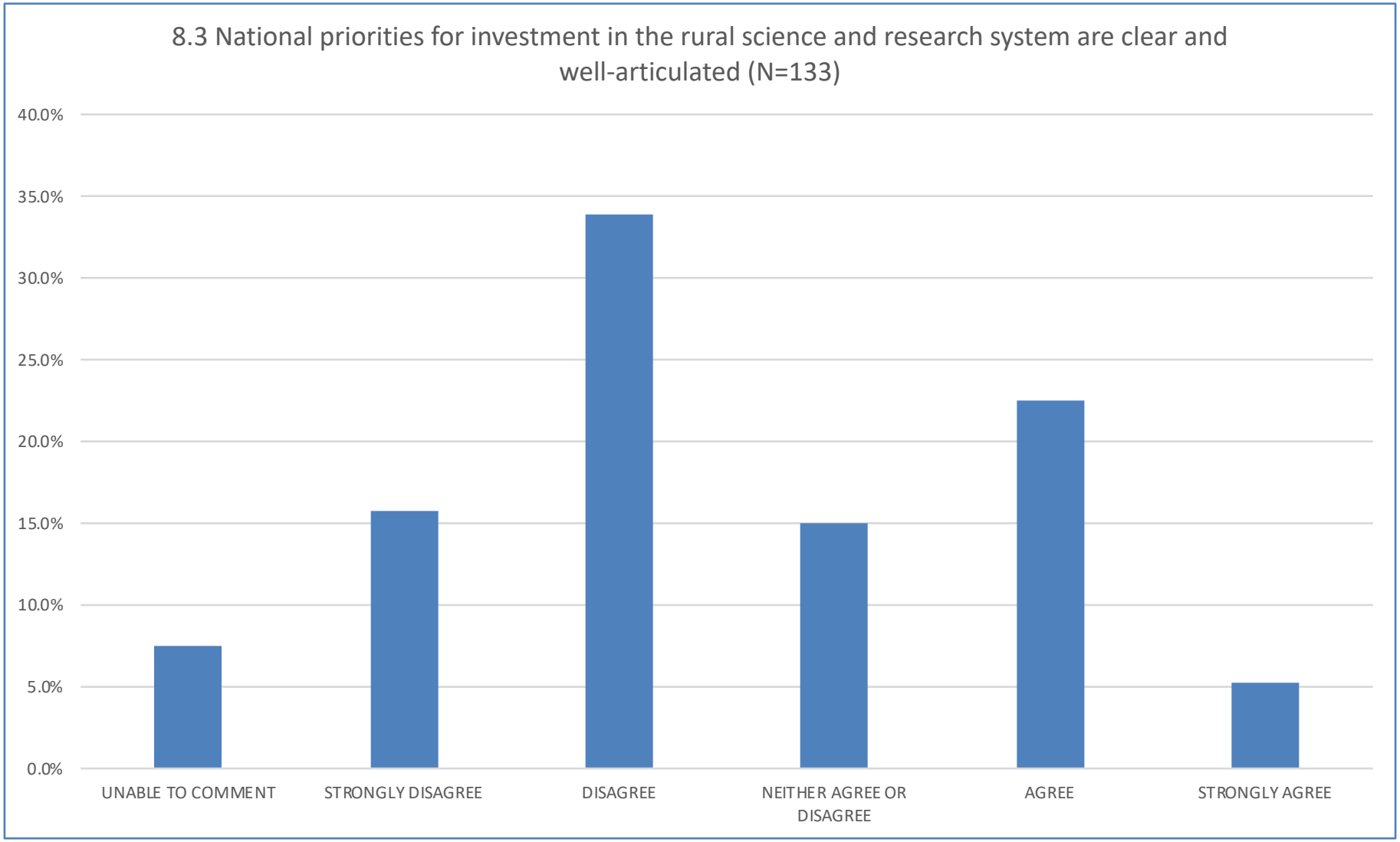
8.3 National priorities for investment in the rural science and research system are clear and well-articulated (N=133)
40.0%
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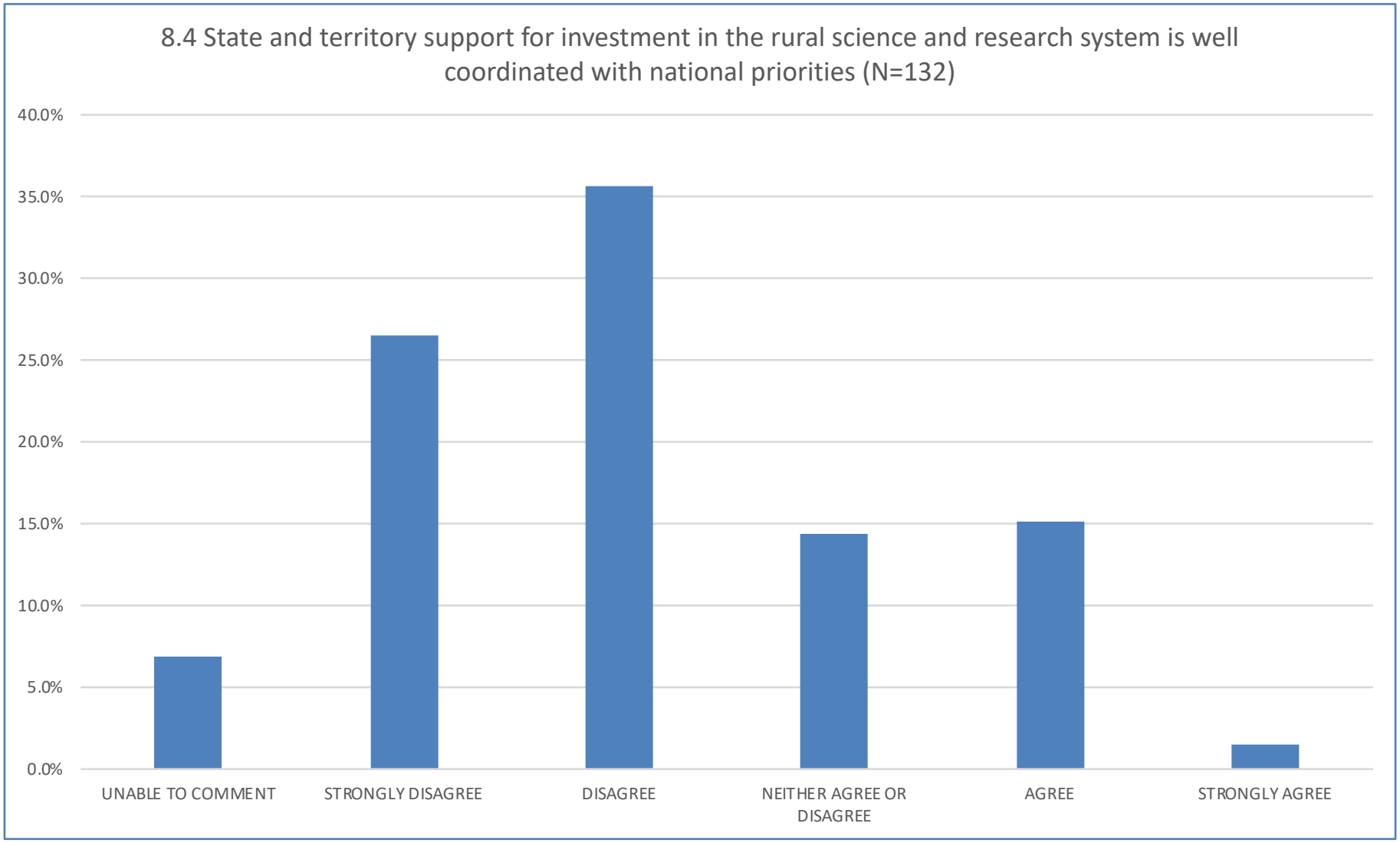
8.4 State and territory support for investment in the rural science and research system is well coordinated with national priorities (N=132)
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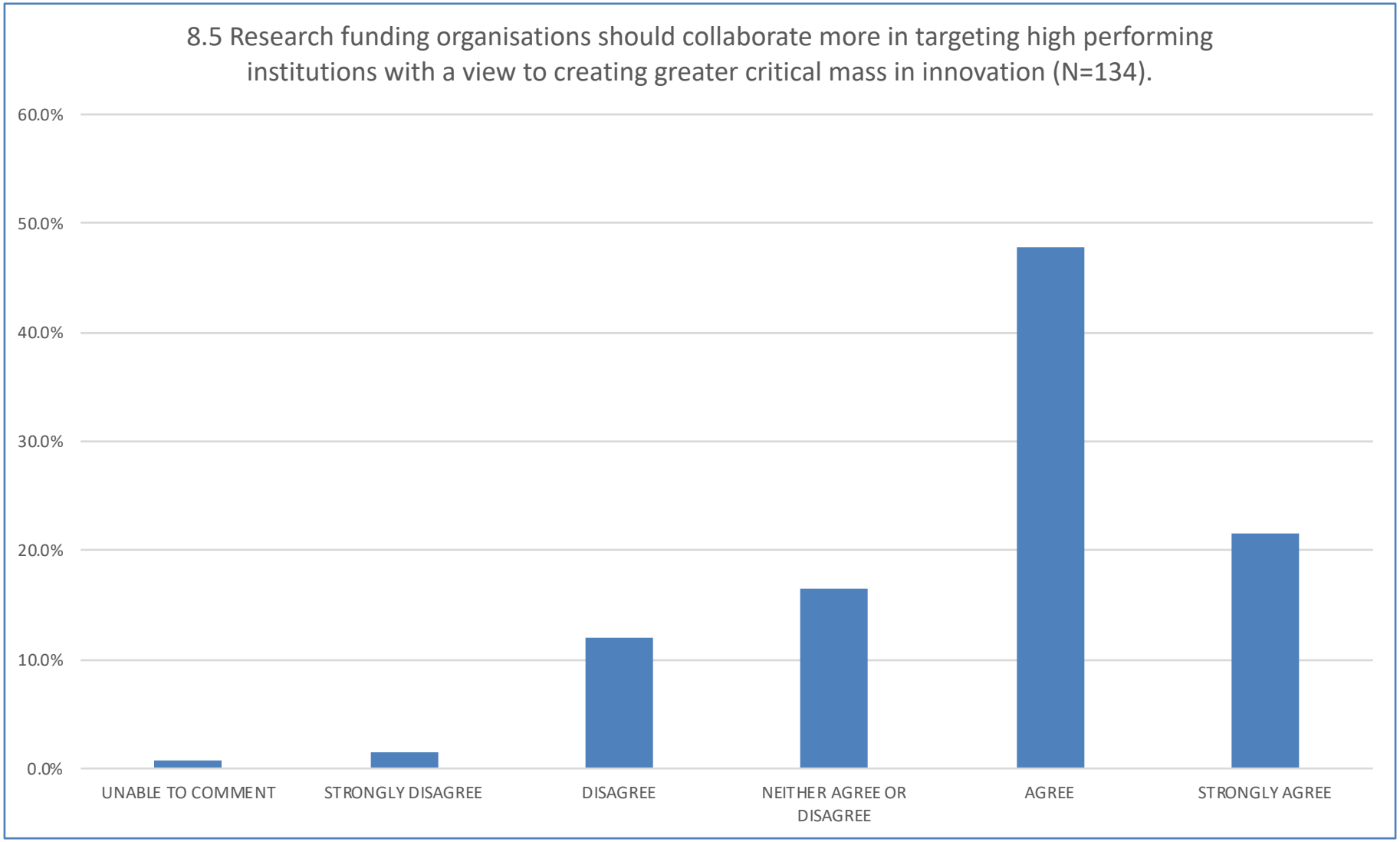
8.5 Research funding organisations should collaborate more in targeting high performing institutions with a view to creating greater critical mass in innovation (N=134).
60.0%
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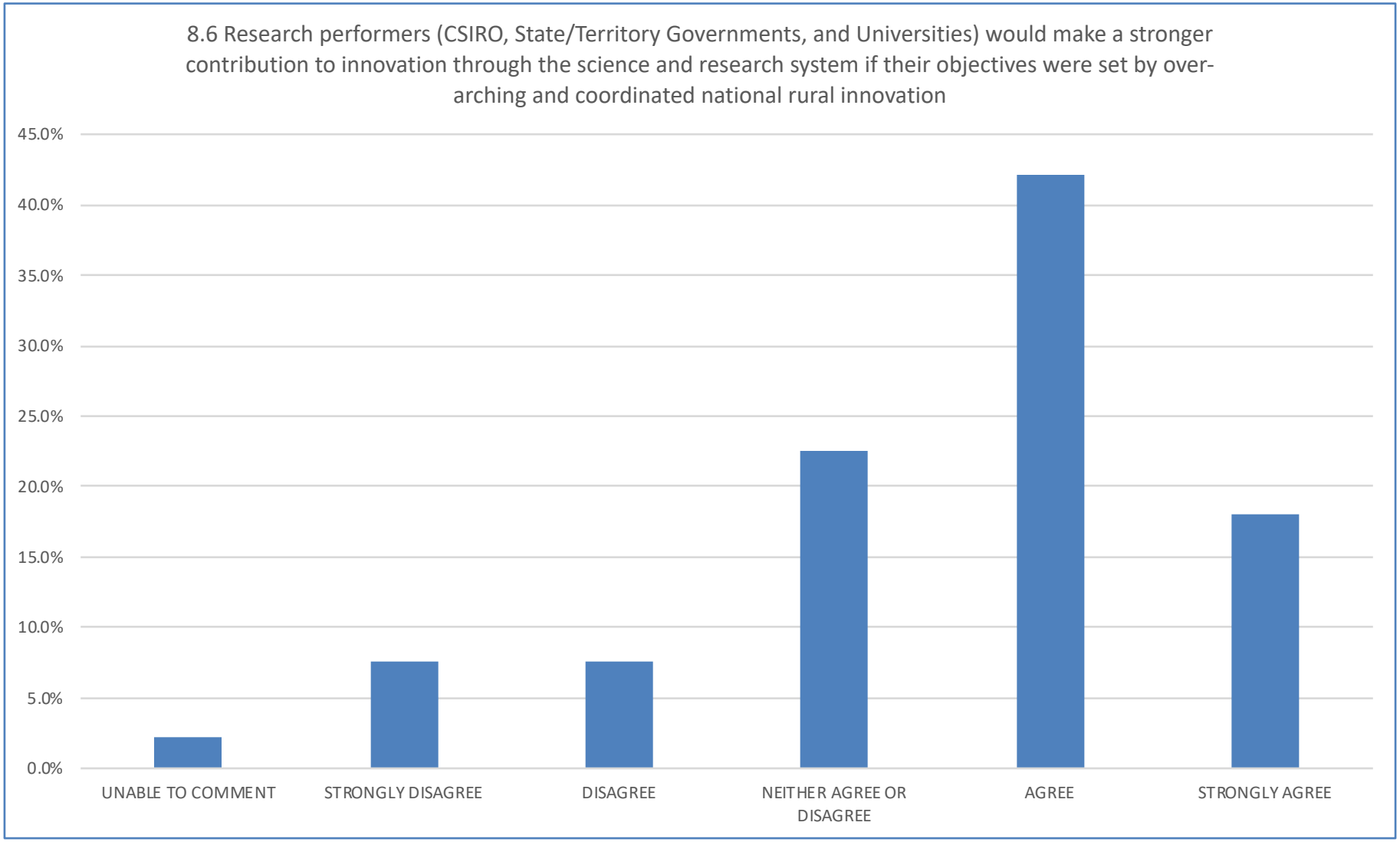
8.6 Research performers (CSIRO, State/Territory Governments, and Universities) would make a stronger contribution to innovation through the science and research system if their objectives were set by over-arching and coordinated national rural innovation
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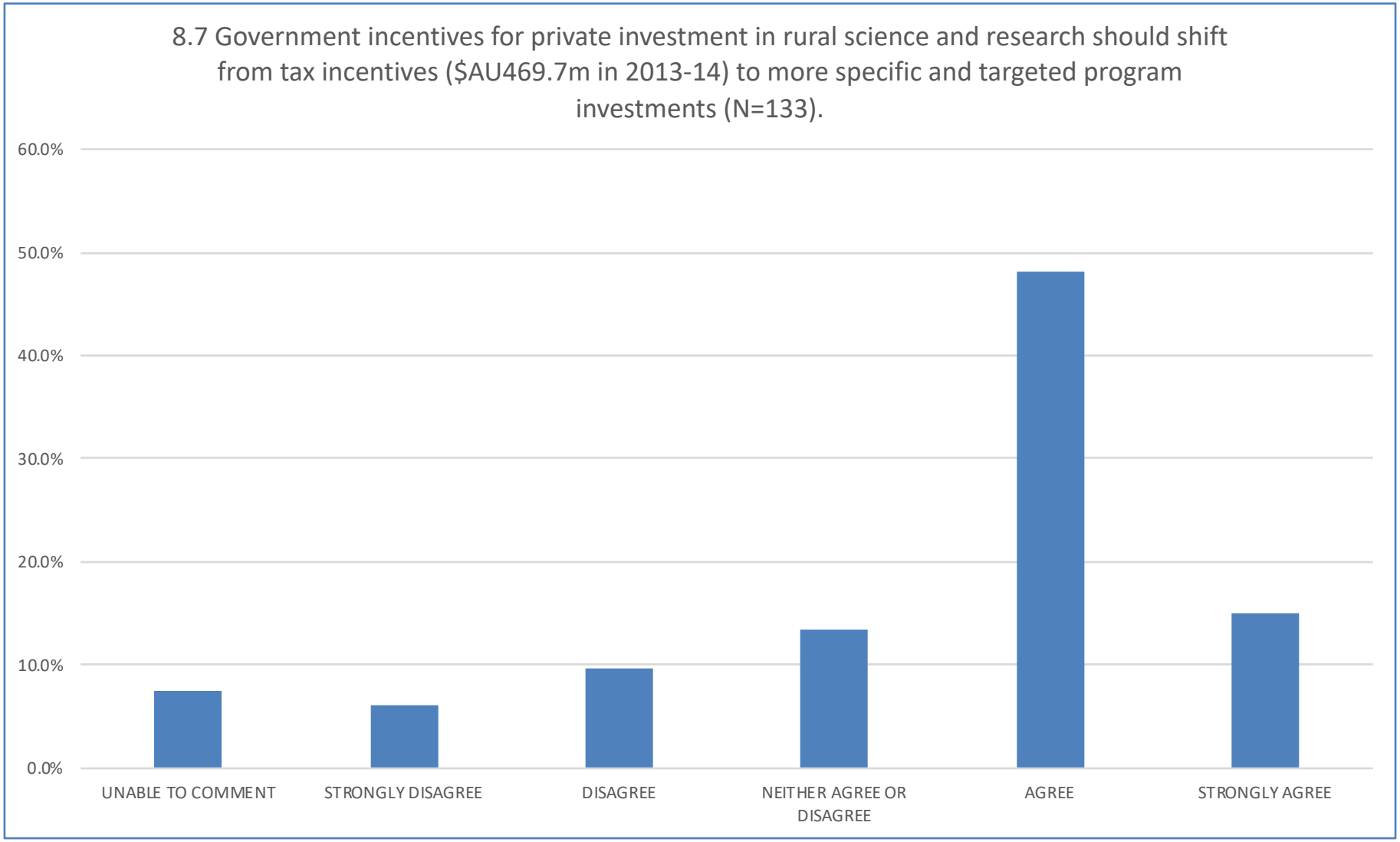
8.7 Government incentives for private investment in rural science and research should shift from tax incentives ($AU469.7m in 2013-14) to more specific and targeted program investments (N=133).
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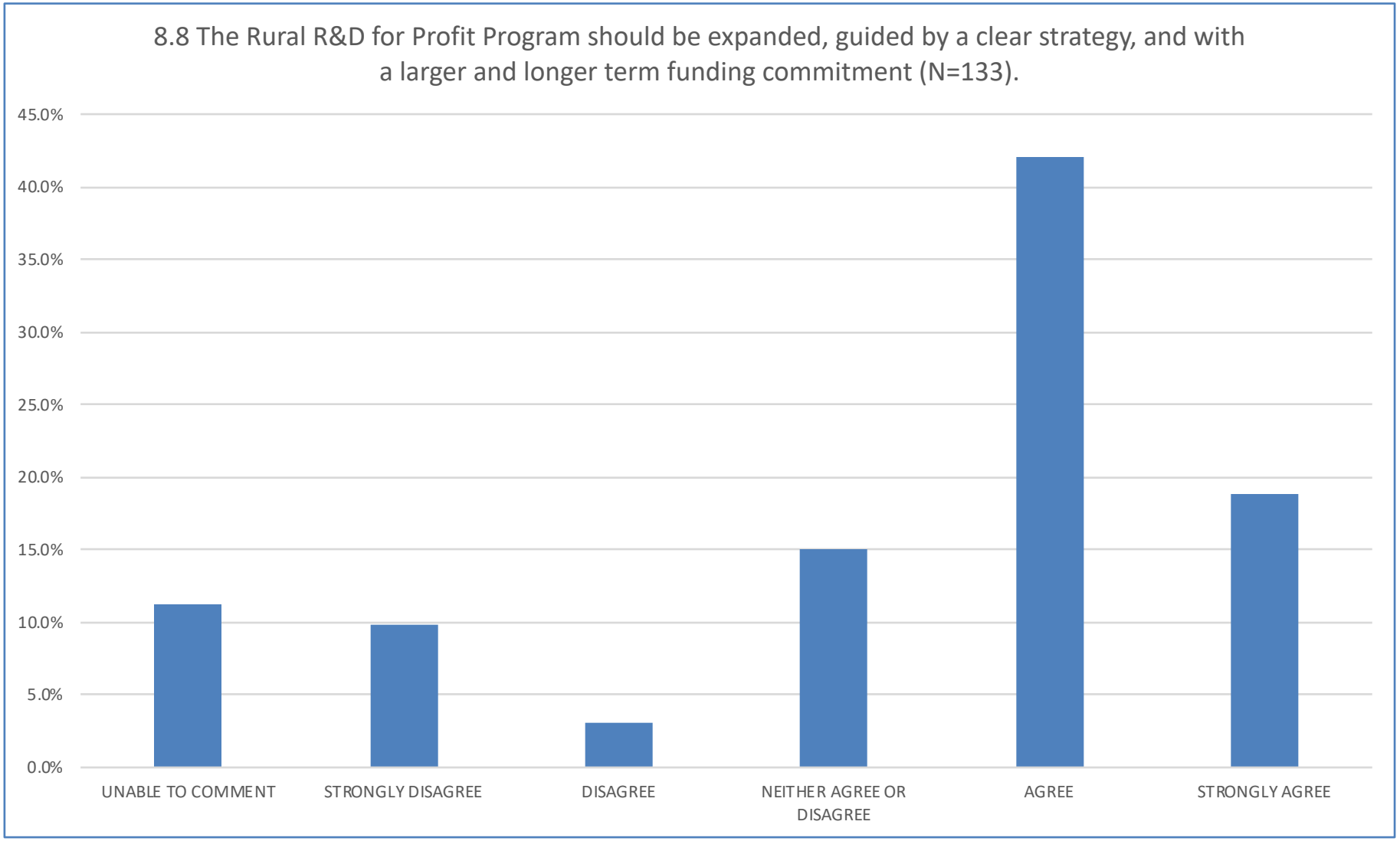
8.8 The Rural R&D for Profit Program should be expanded, guided by a clear strategy, and with a larger and longer term funding commitment (N=133).
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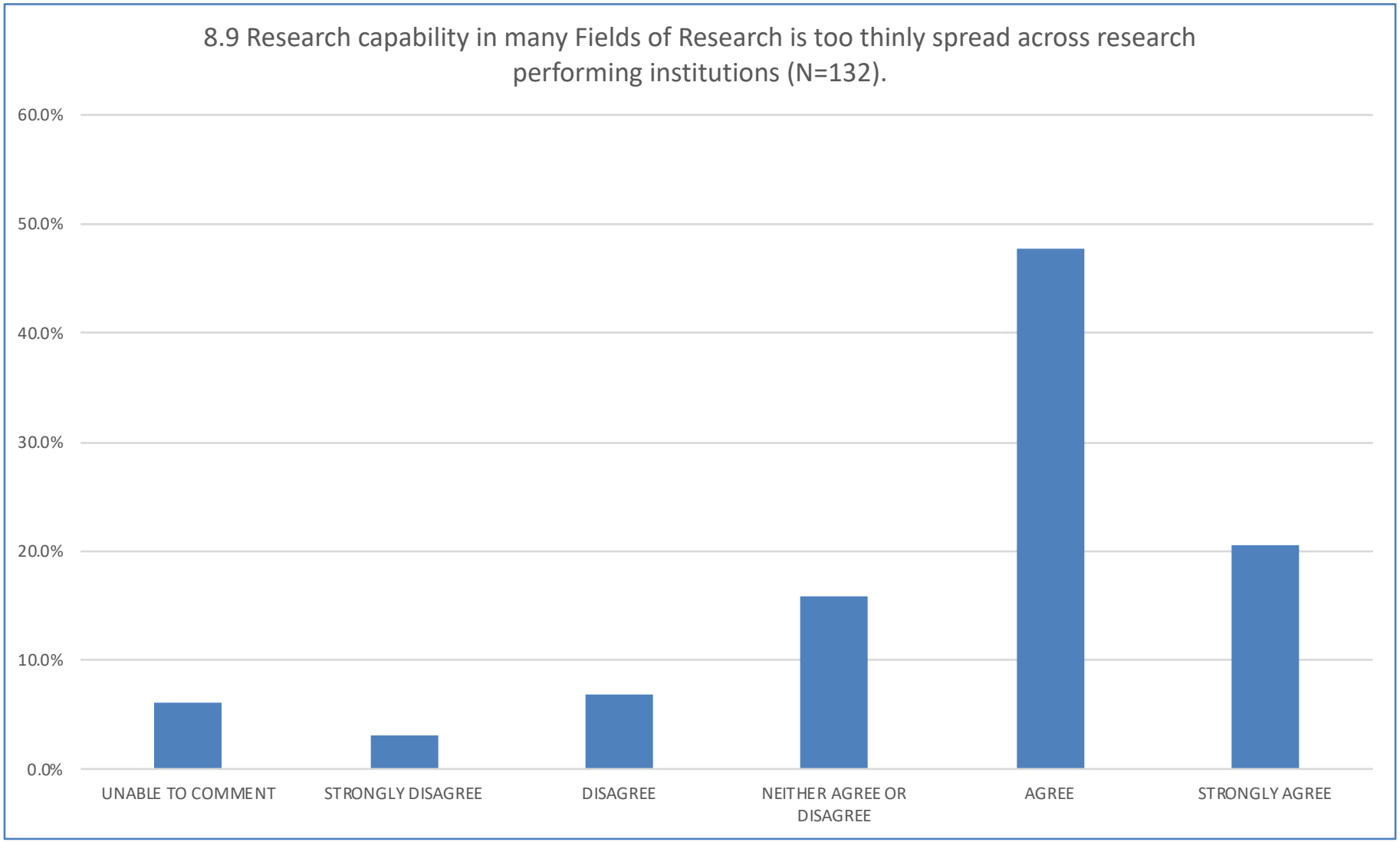
8.9 Research capability in many Fields of Research is too thinly spread across research performing institutions (N=132).
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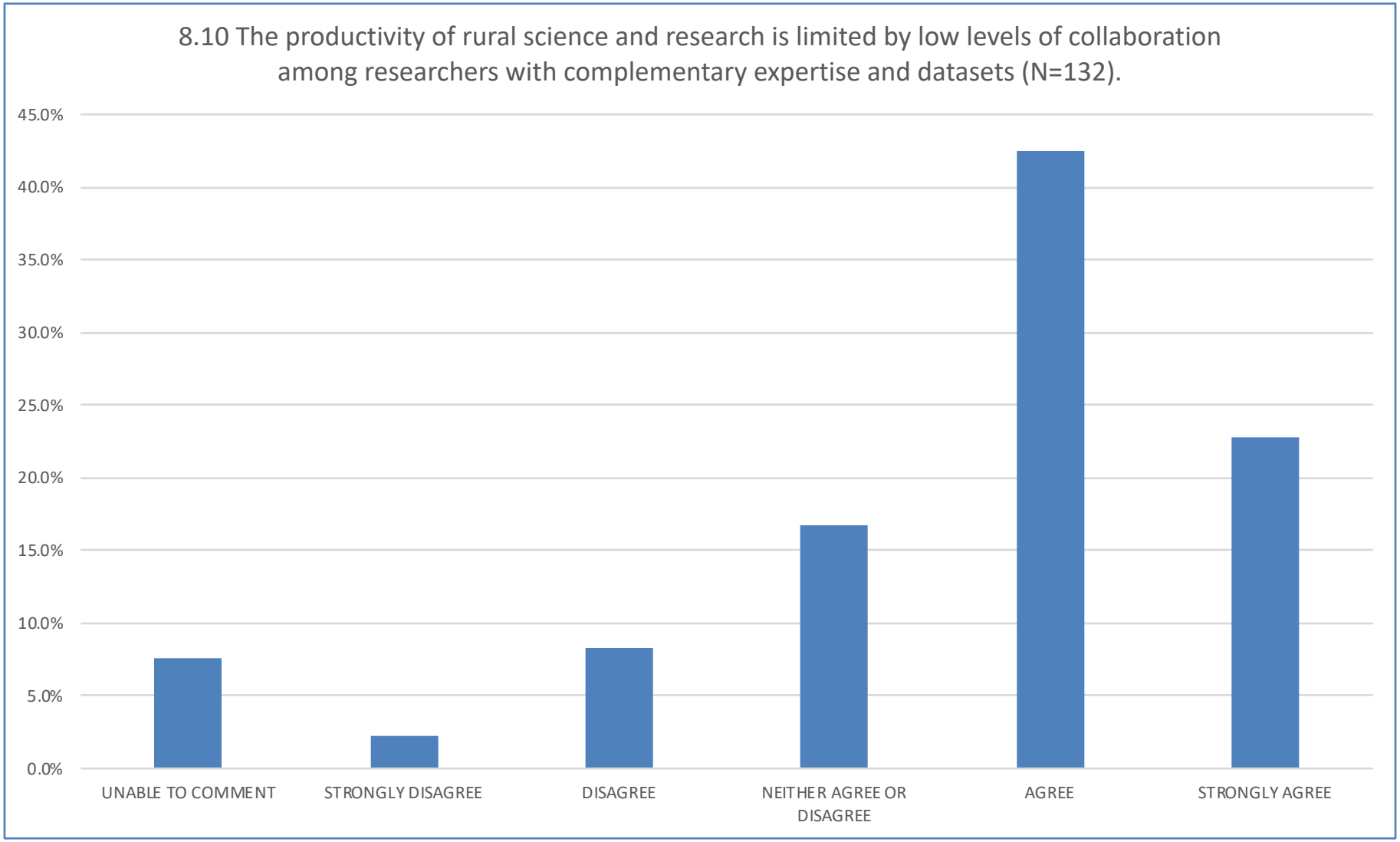
8.10 The productivity of rural science and research is limited by low levels of collaboration among researchers with complementary expertise and datasets (N=132).
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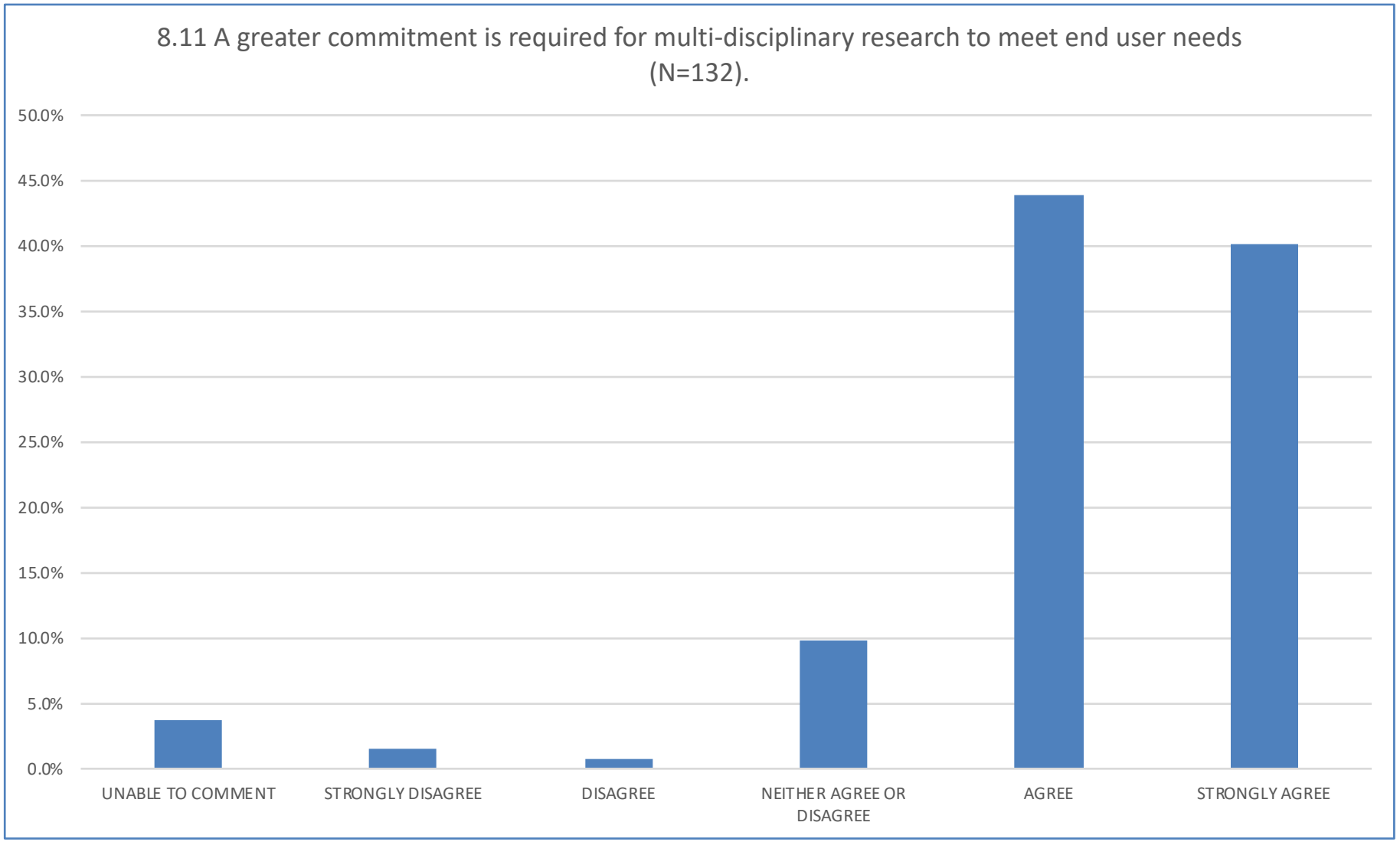
8.11 A greater commitment is required for multi-disciplinary research to meet end user needs (N=132).
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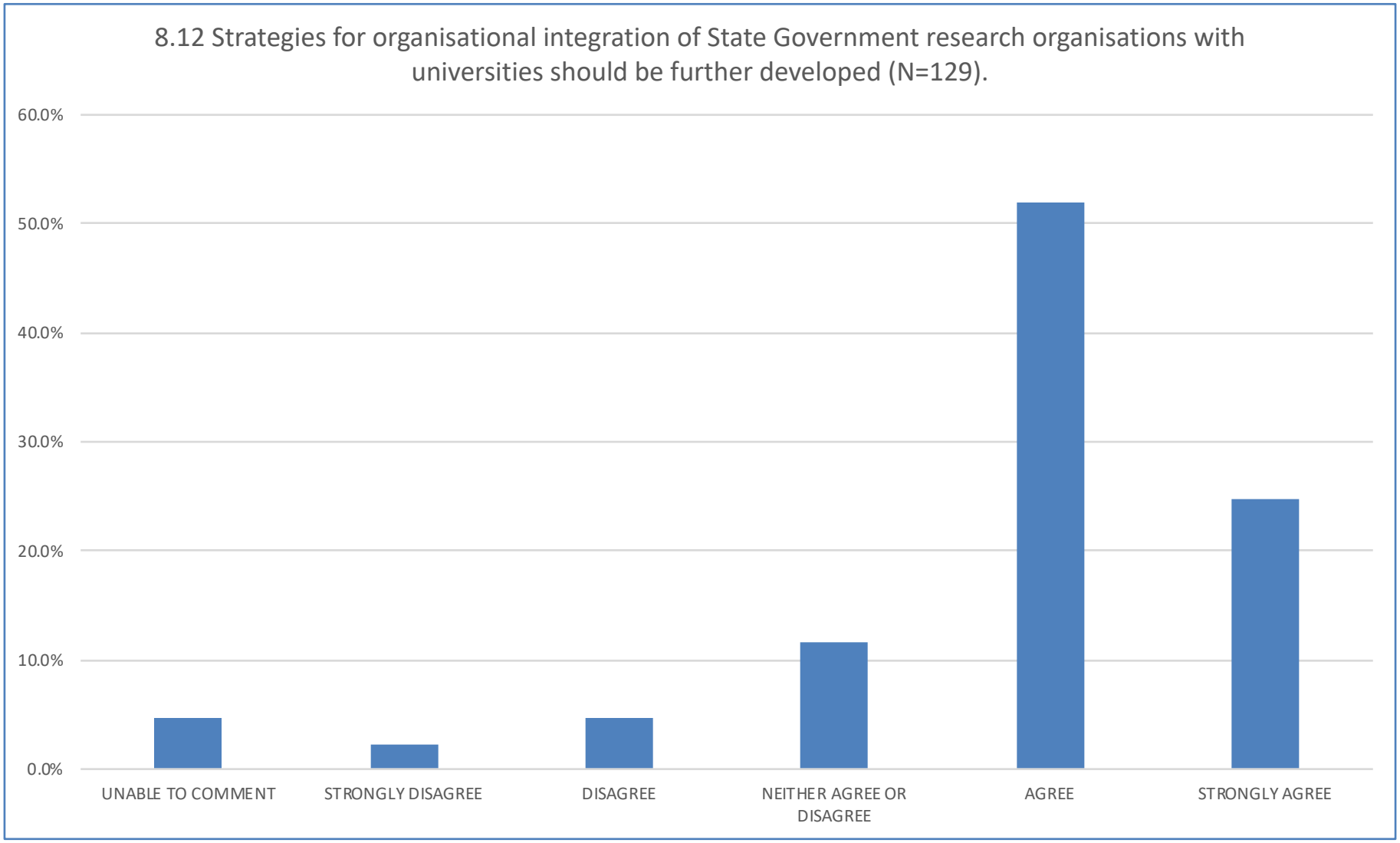
8.12 Strategies for organisational integration of State Government research organisations with universities should be further developed (N=129).
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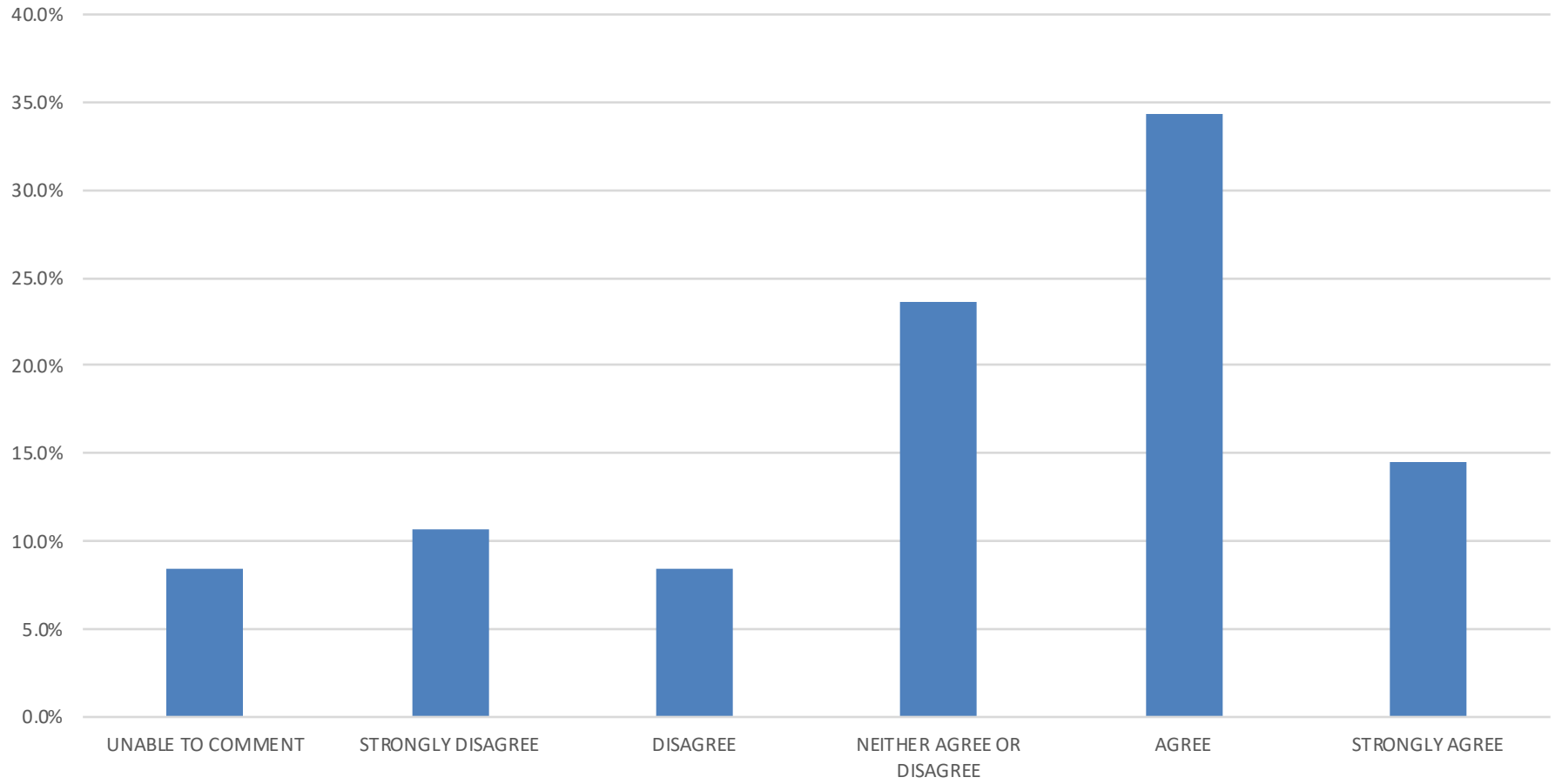
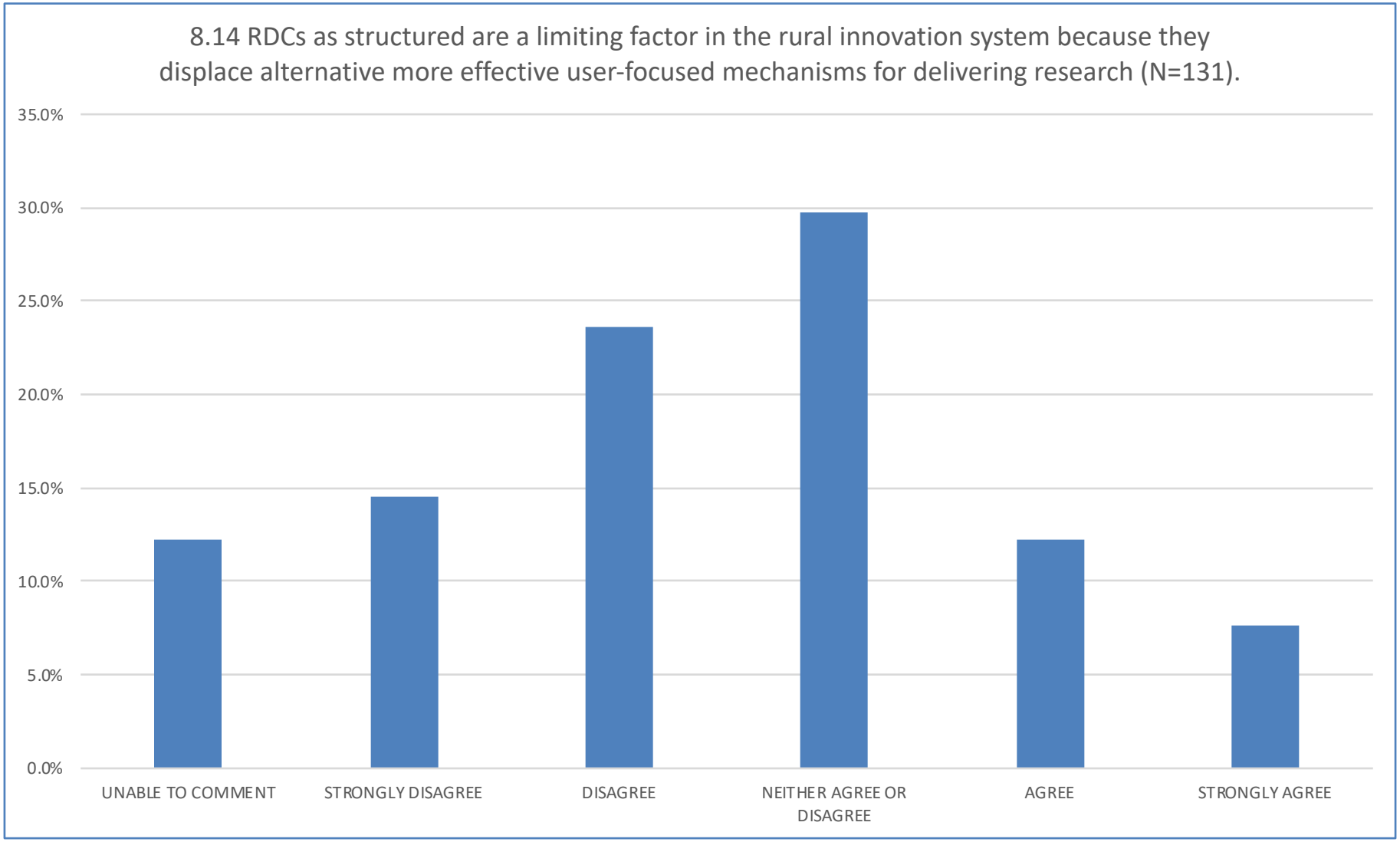
RURAL RESEARCH AND DEVELOPMENT COPORATIONS

8.13 Rural Research and Development Corporations (RDCs) as structured are an enhancing factor in the rural innovation system because of their user focus for delivering relevant research (N=131).




8.14 RDCs as structured are a limiting factor in the rural innovation system because they displace alternative more effective user-focused mechanisms for delivering research (N=131).
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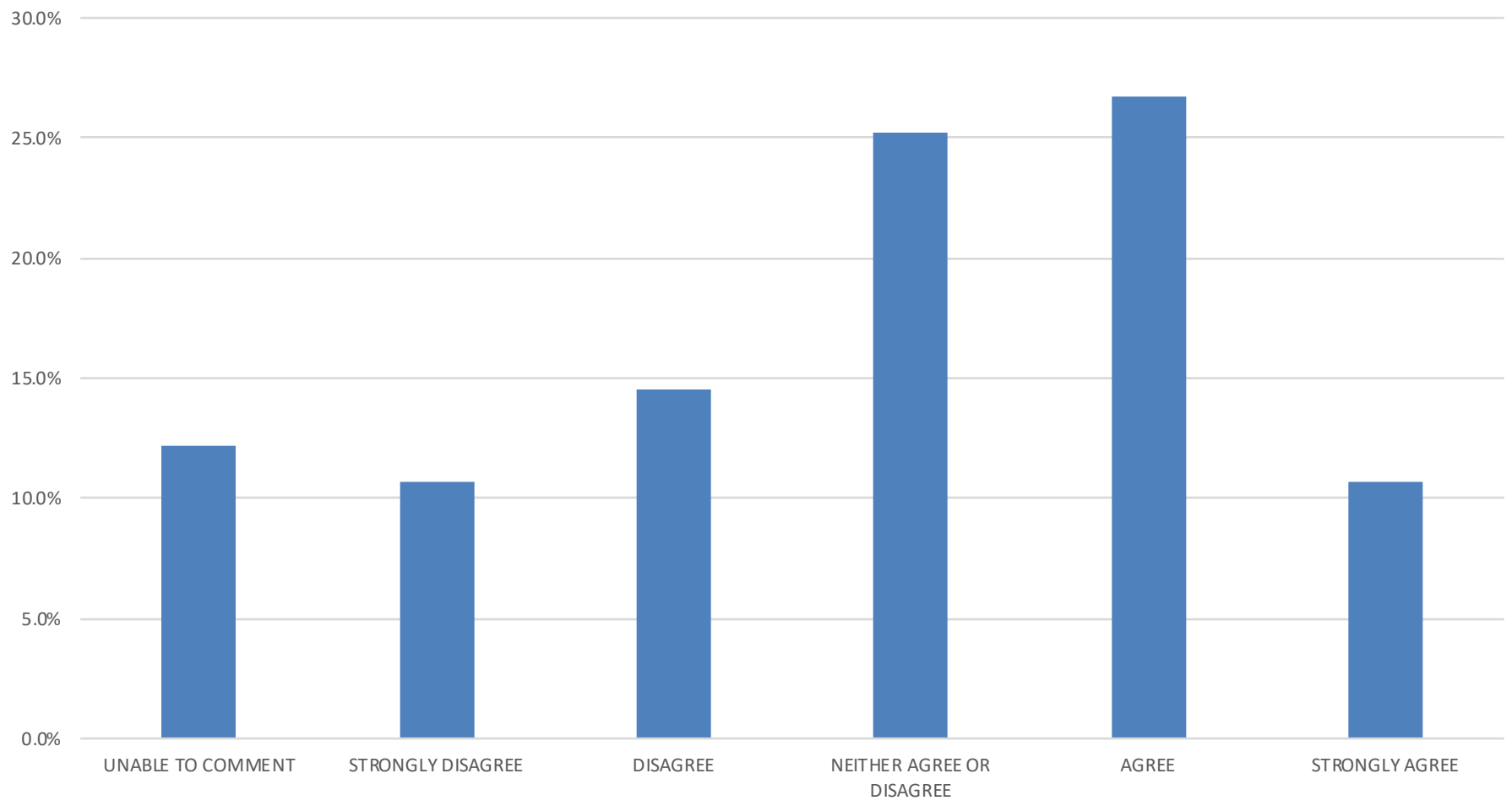
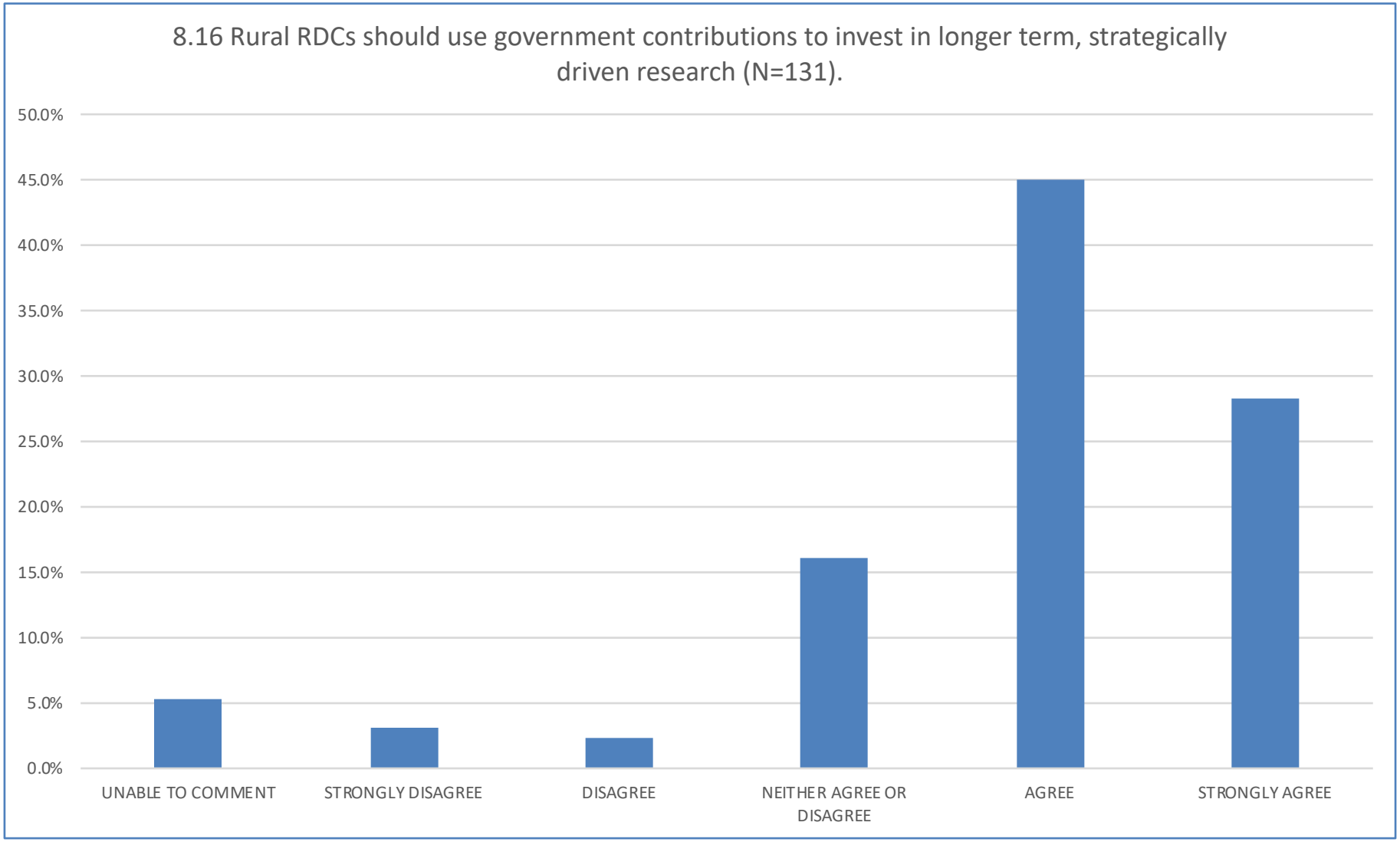
8.15 Support for rural innovation would be more effective if some of the roles played by RDCs were more open to private sector providers (N=131).




8.16 Rural RDCs should use government contributions to invest in longer term, strategically driven research (N=131).
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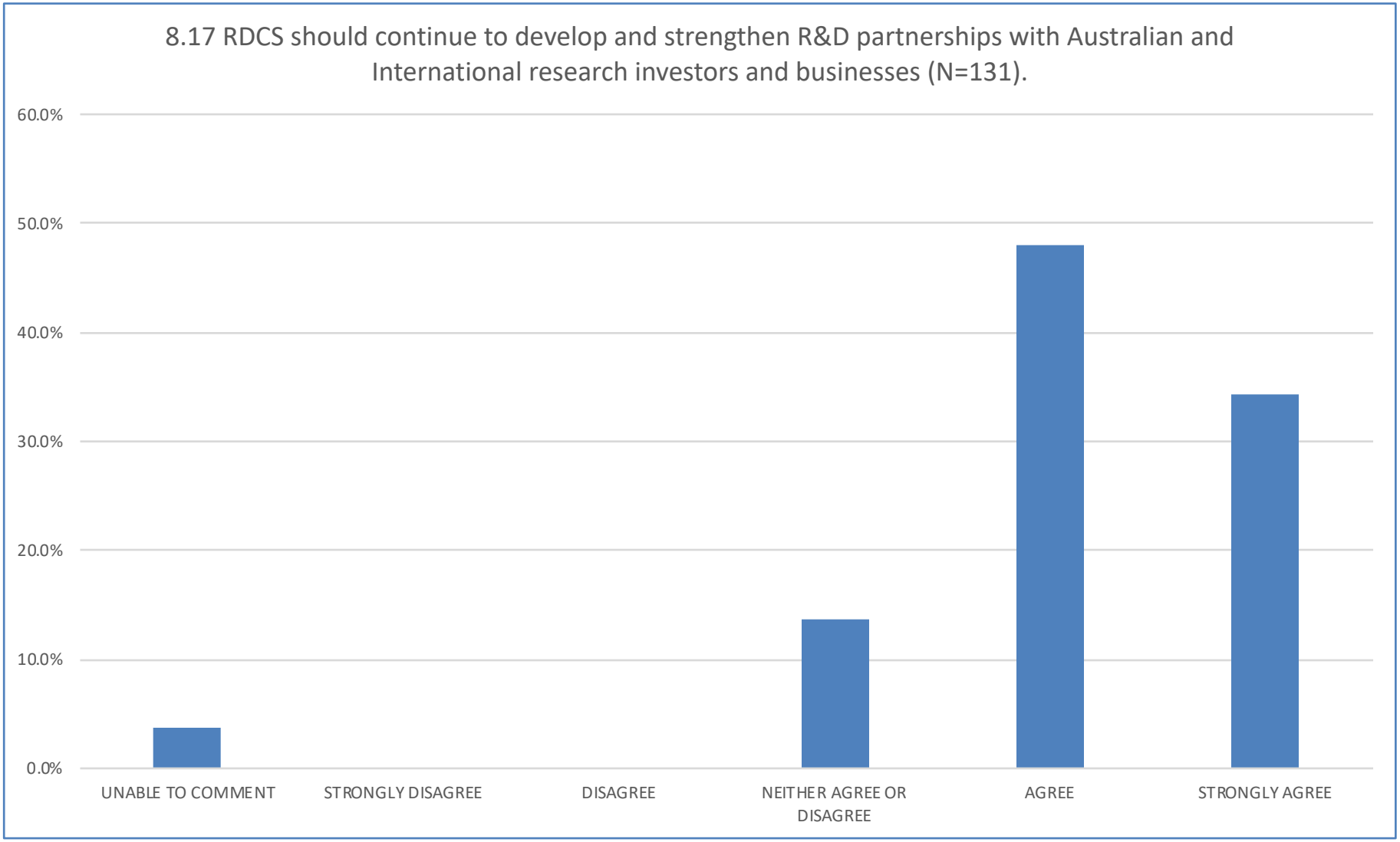
8.17 RDCS should continue to develop and strengthen R&D partnerships with Australian and International research investors and businesses (N=131).
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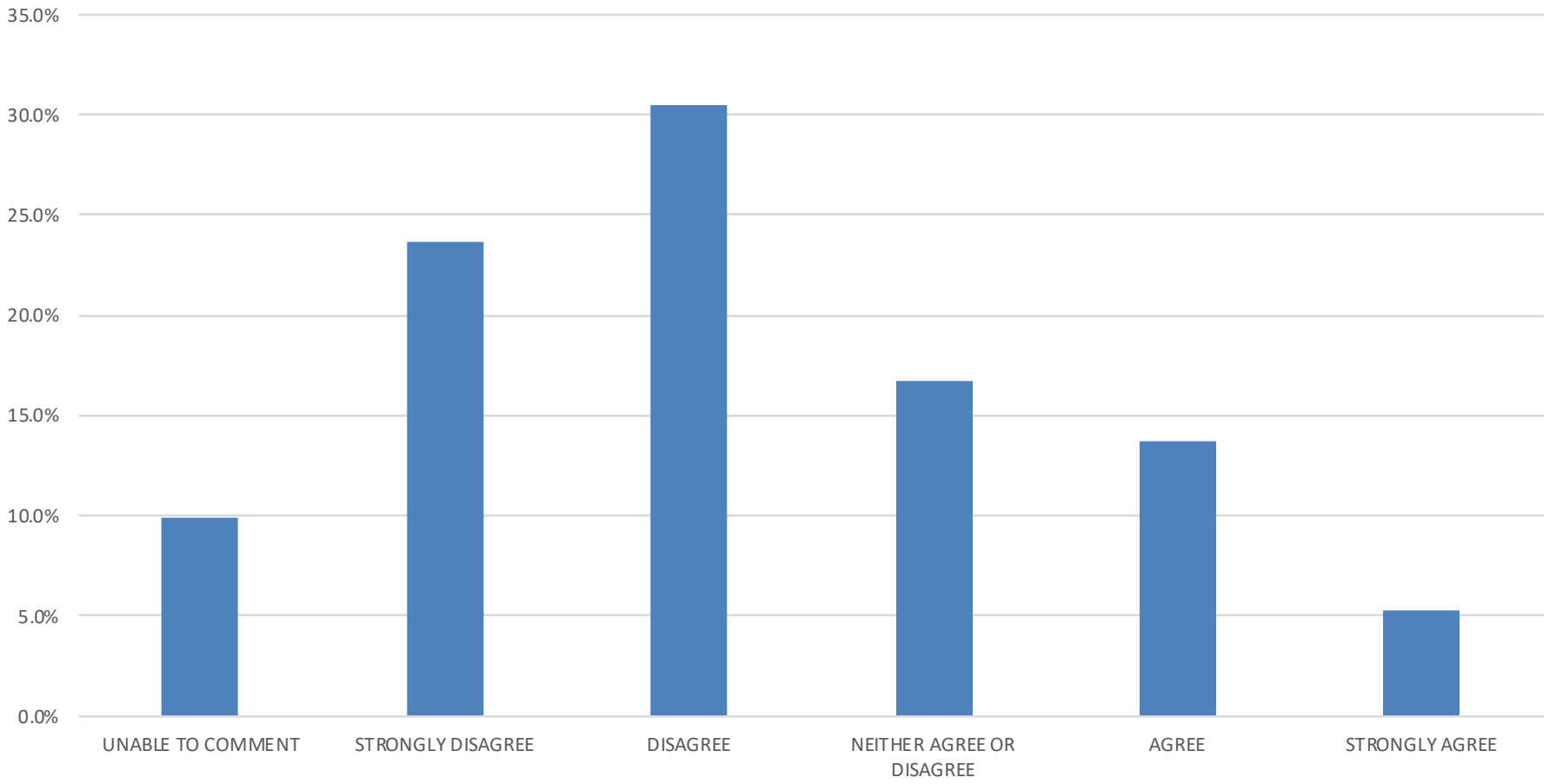
8.21 Leading innovation adopters in the rural economy no longer require access to a specifically Australian Rural R&D community, given cutting edge research and technologies are available internationally (N=131).



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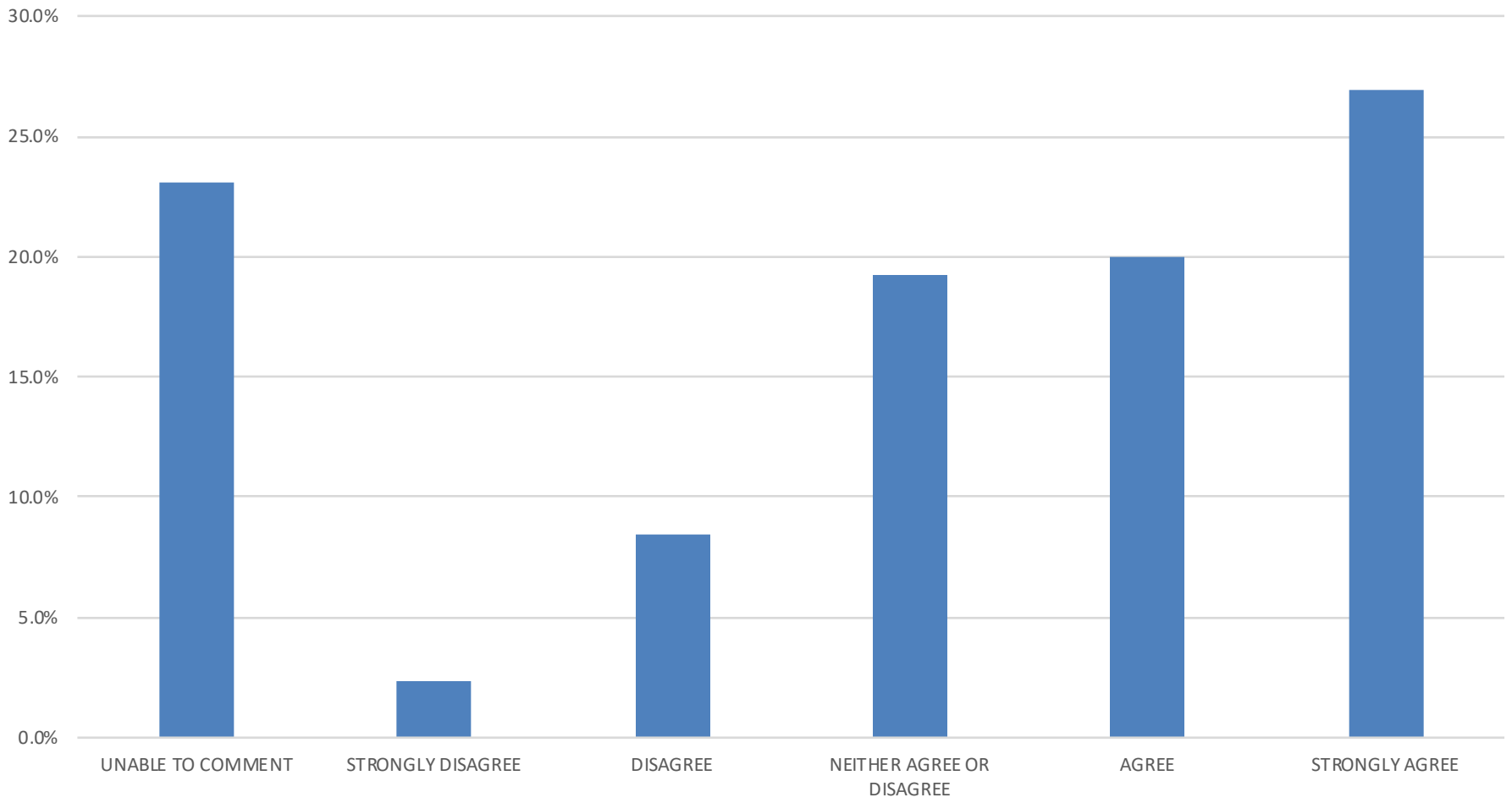
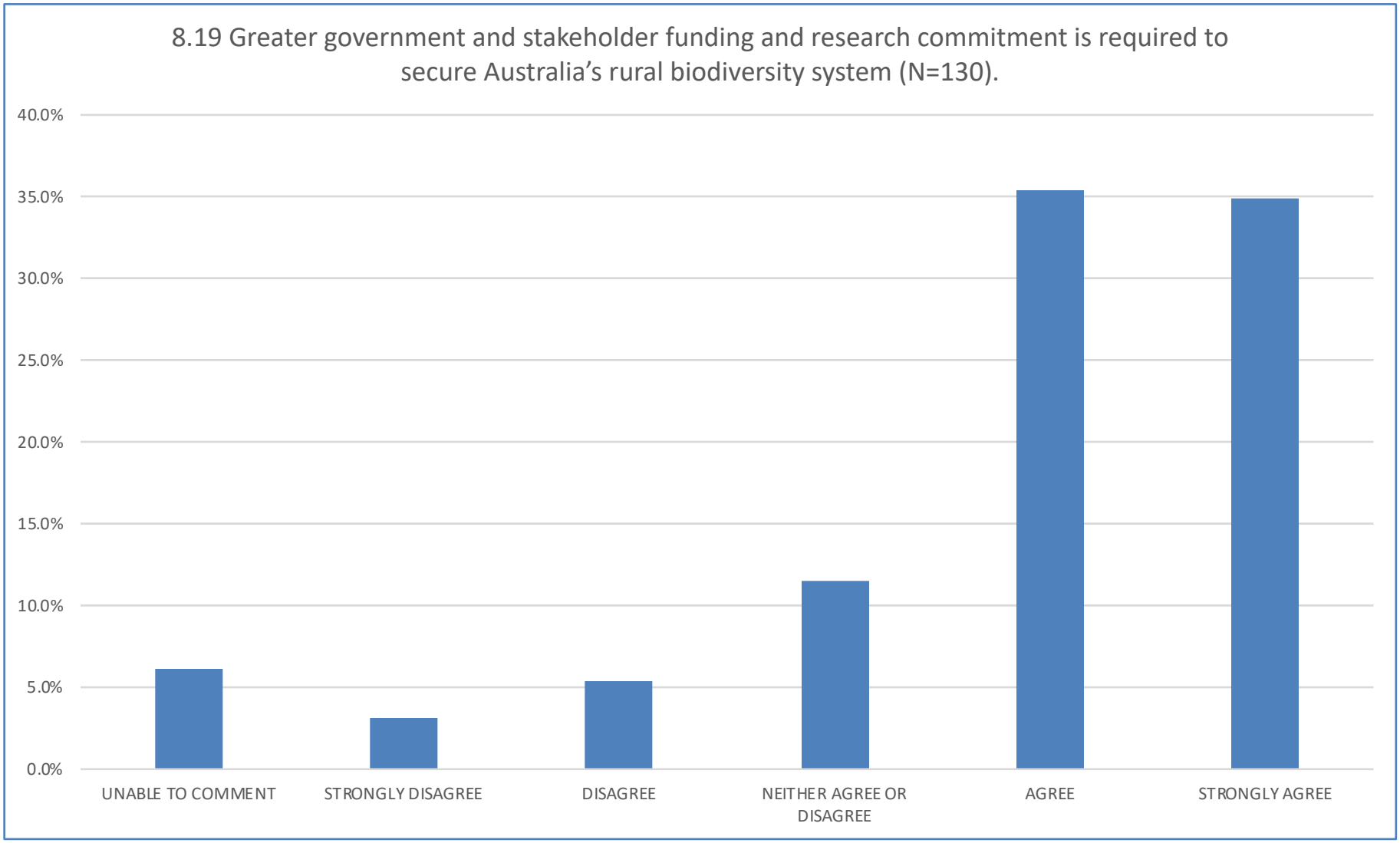
ENVIRONMENT AND BIODIVERSITY MANAGEMENT

8.18 Since the abolition of Land and Water Australia, insufficient attention and investment has been made in securing the value of Australia's land and water resources (N=130).




8.19 Greater government and stakeholder funding and research commitment is required to secure Australia's rural biodiversity system (N=130).
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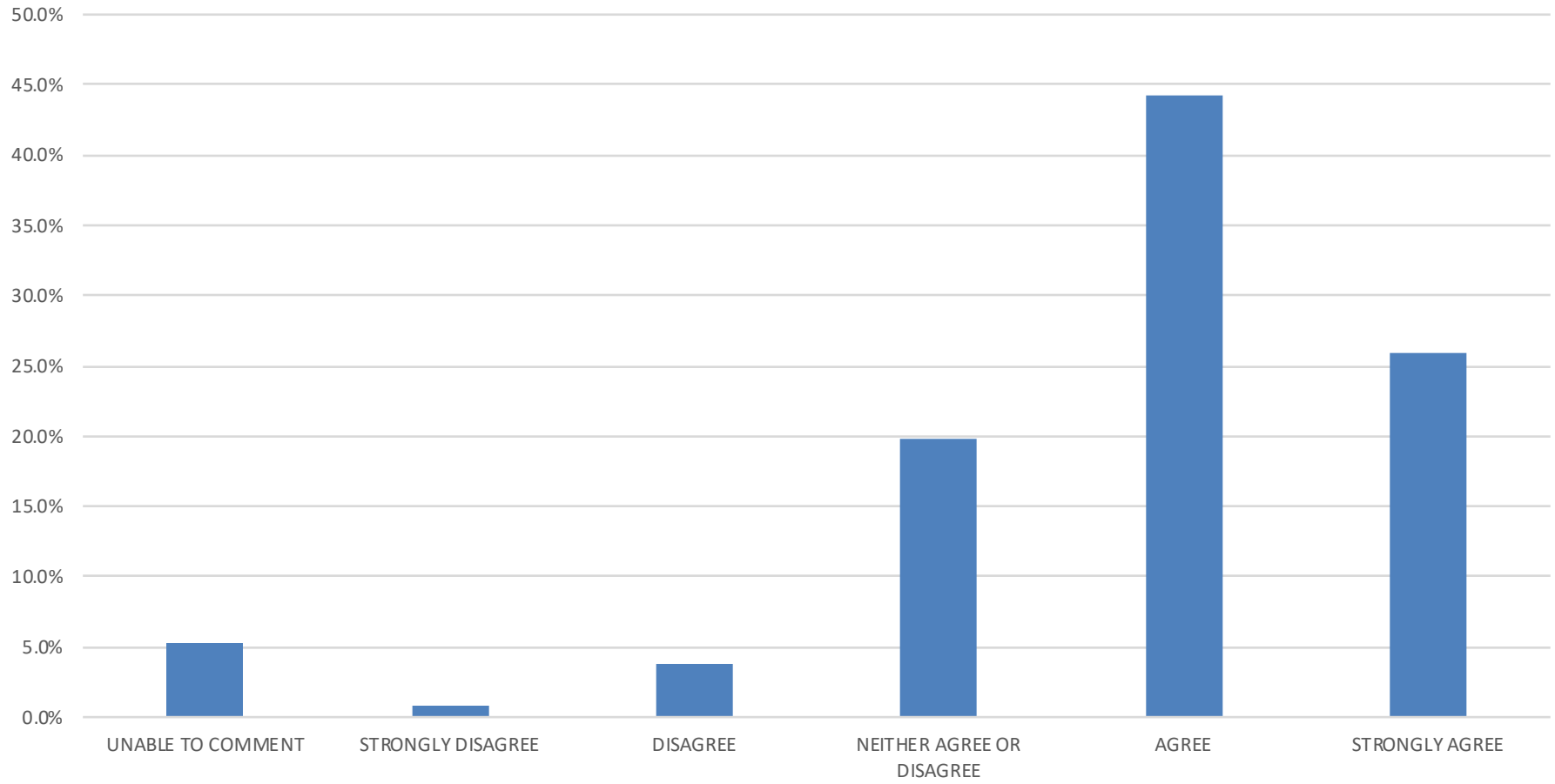
8.20 There is growing potential for the rural innovation system to support farm businesses diversify into alternative locally-generated energy systems (solar, wind biomass ,etc), which reduce production costs and associated business risks (N=131).



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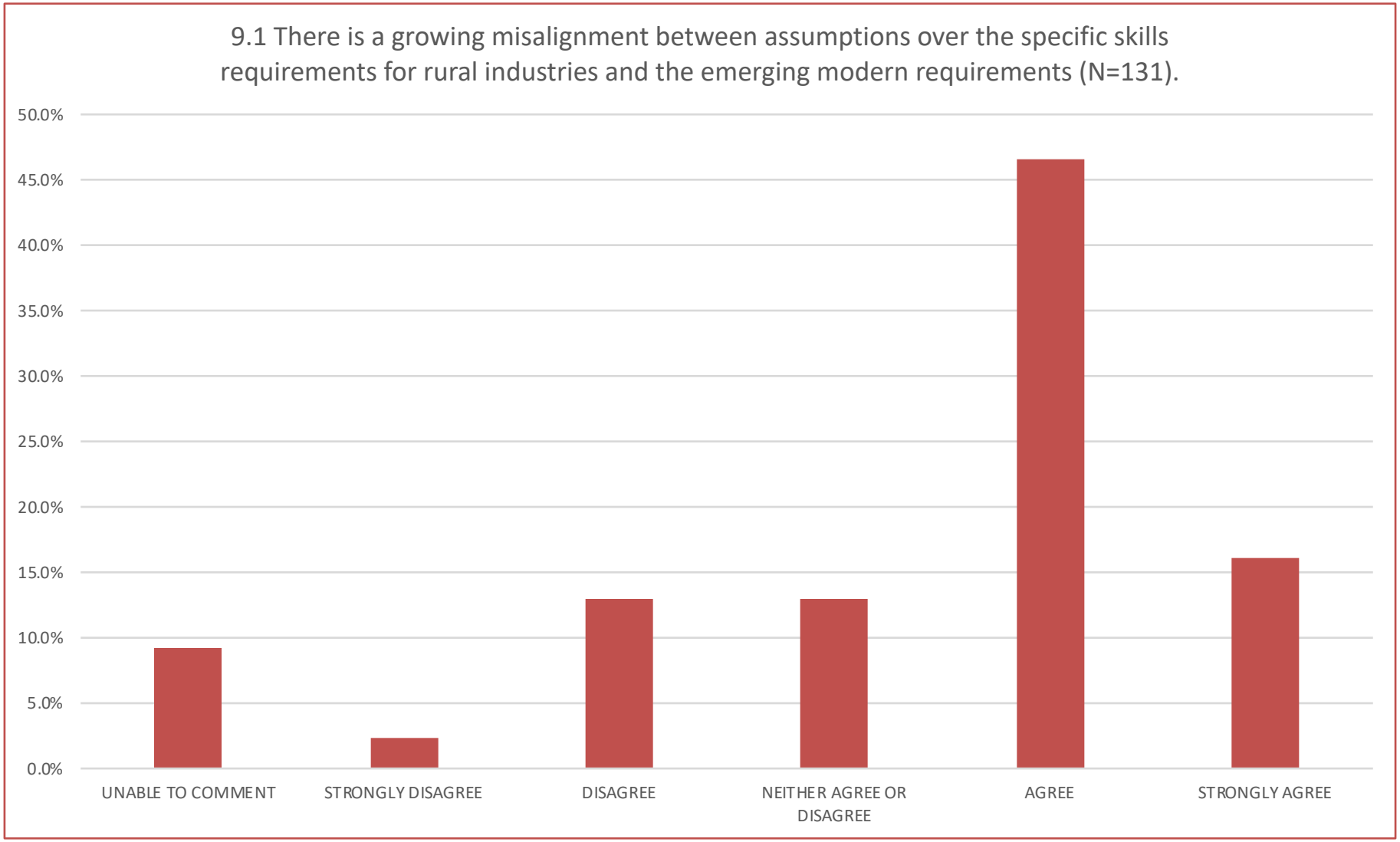
EDUCATION, TRAINING AND TALENT ACQUISITION


9.1 There is a growing misalignment between assumptions over the specific skills requirements for rural industries and the emerging modern requirements (N=131).
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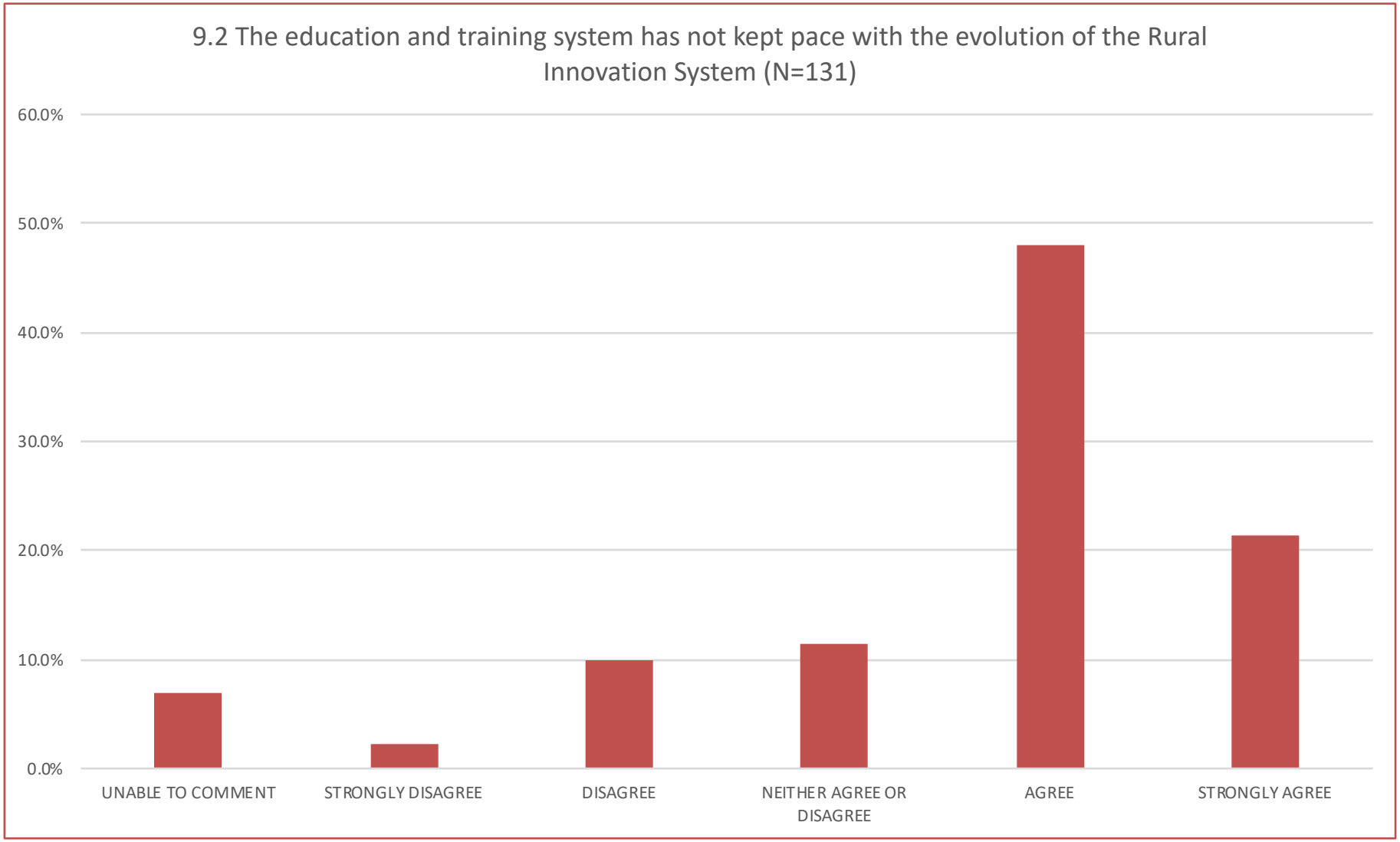
9.2 The education and training system has not kept pace with the evolution of the Rural Innovation System (N=131)
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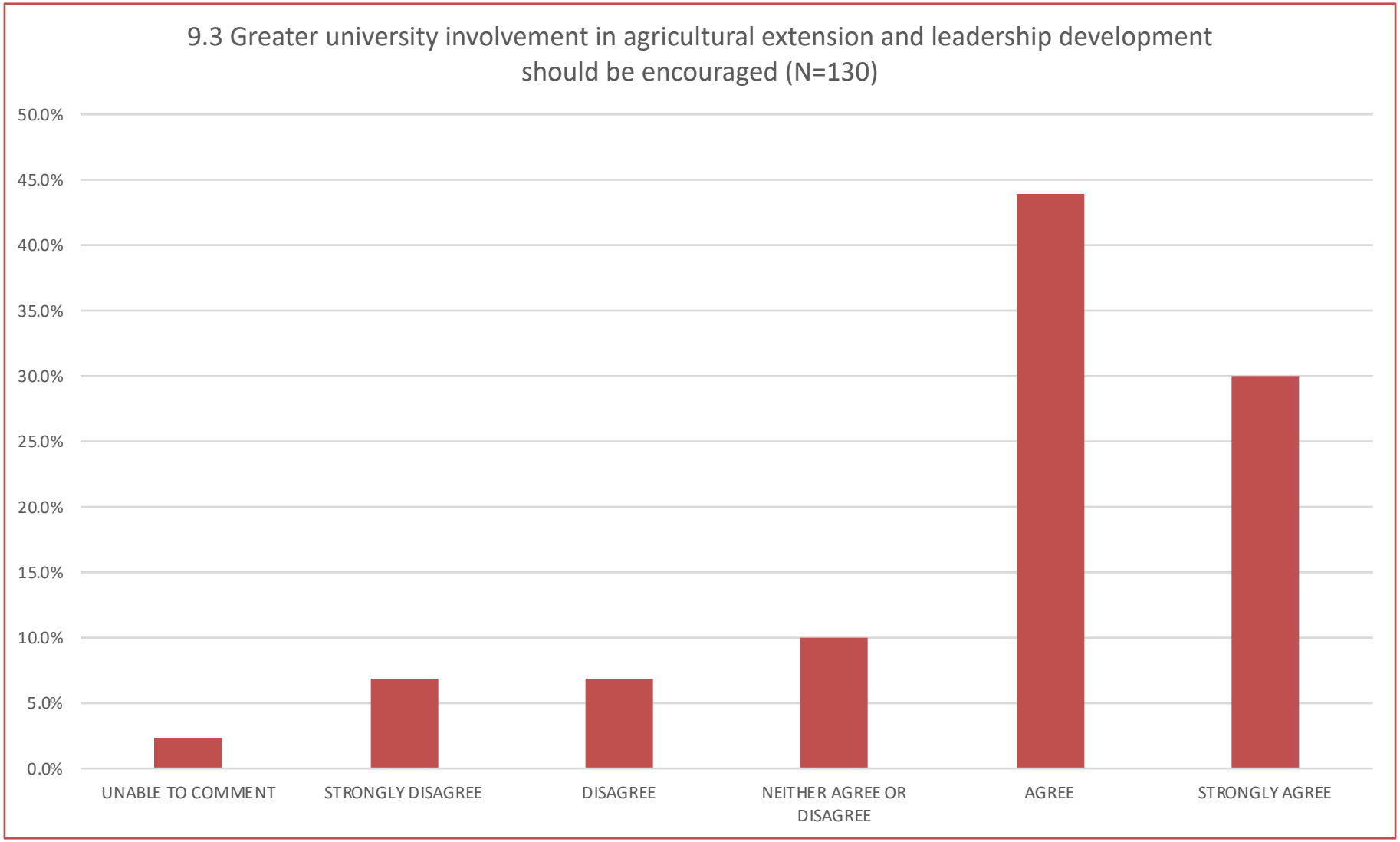
9.3 Greater university involvement in agricultural extension and leadership development should be encouraged (N=130)
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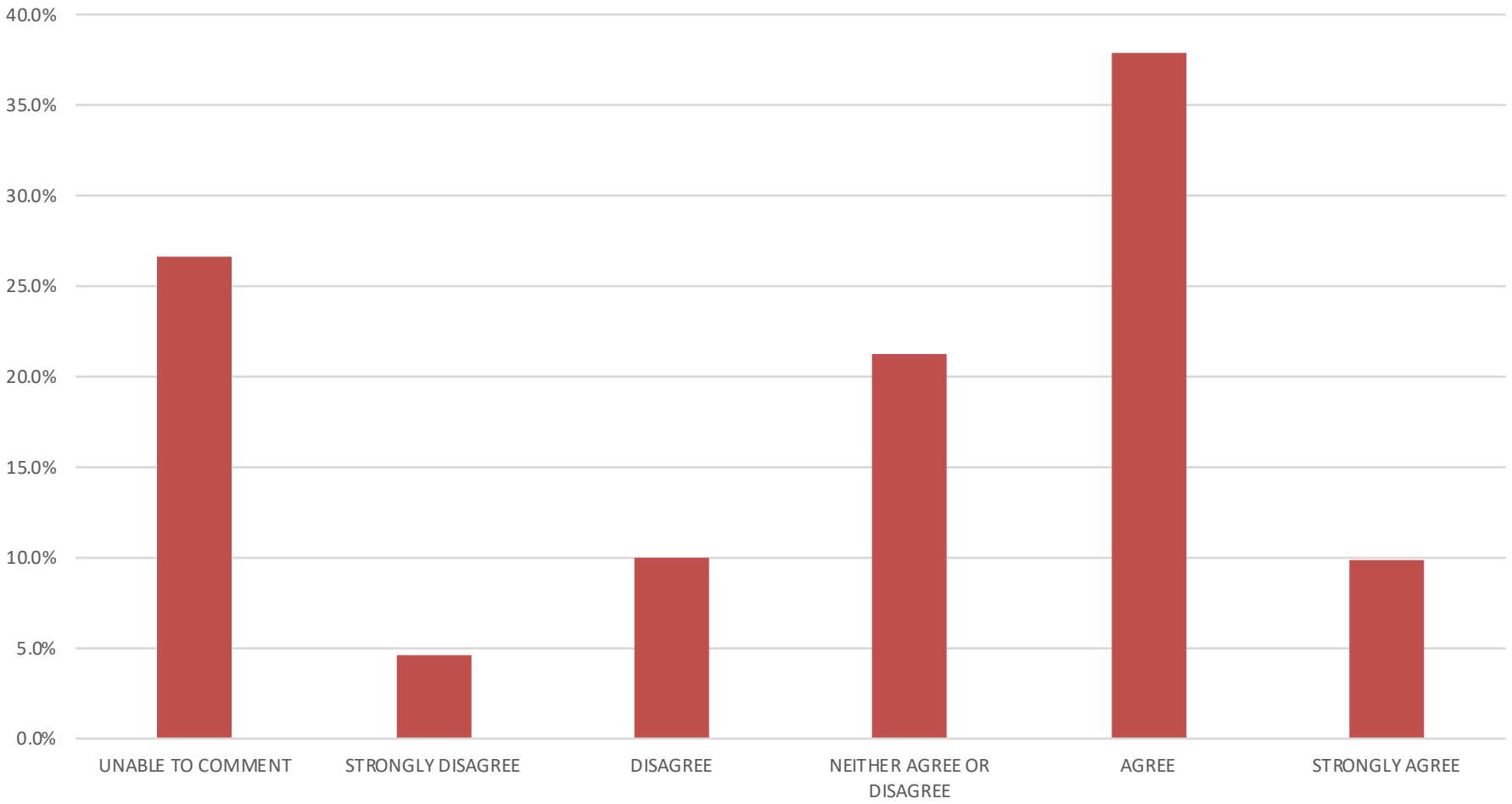
9.4 The development of university-supported “smart farms” is making an important contribution to technology awareness and technology adoption (N=132).



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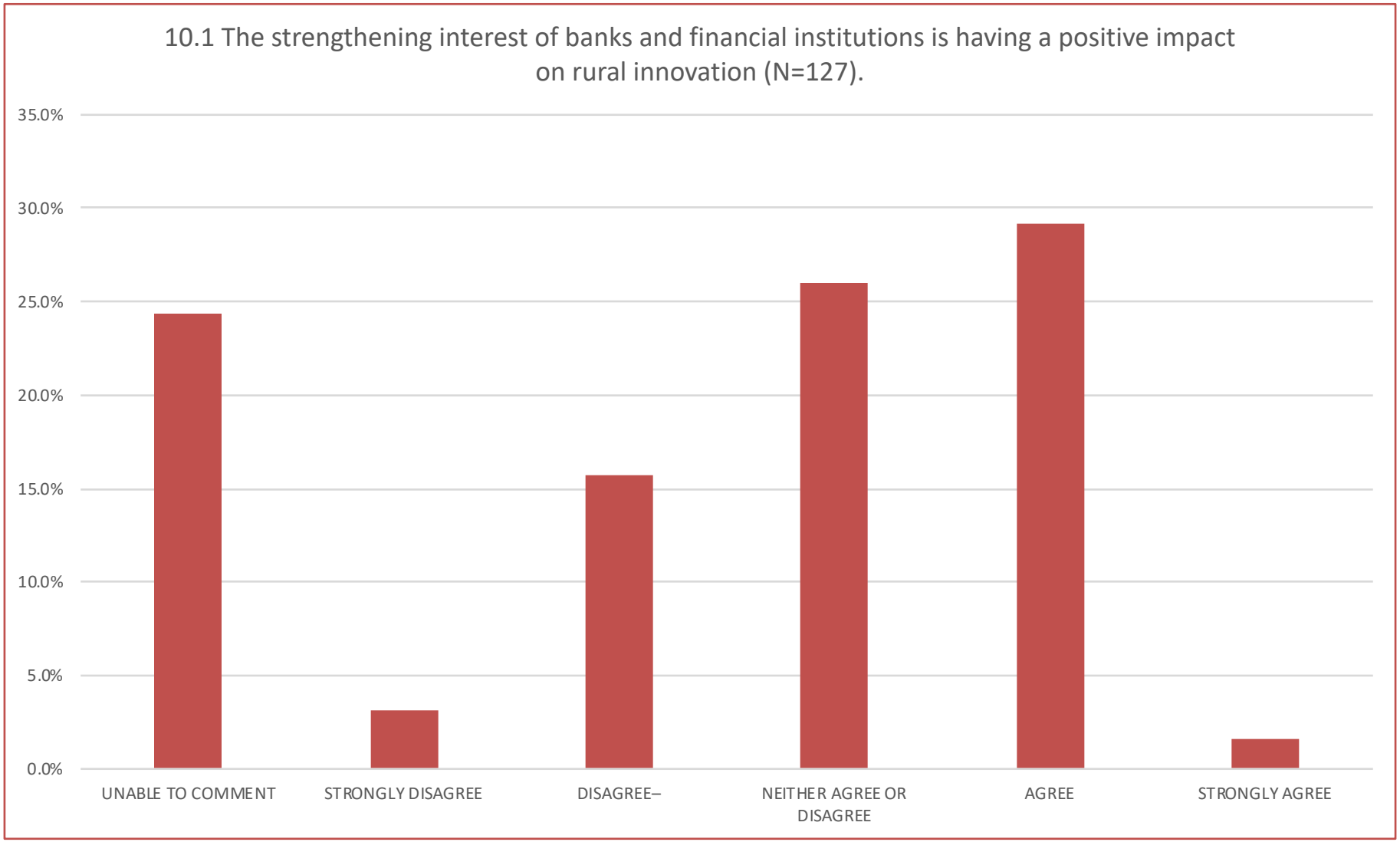
FINANCE AND STARTUPS


10.1 The strengthening interest of banks and financial institutions is having a positive impact on rural innovation (N=127).
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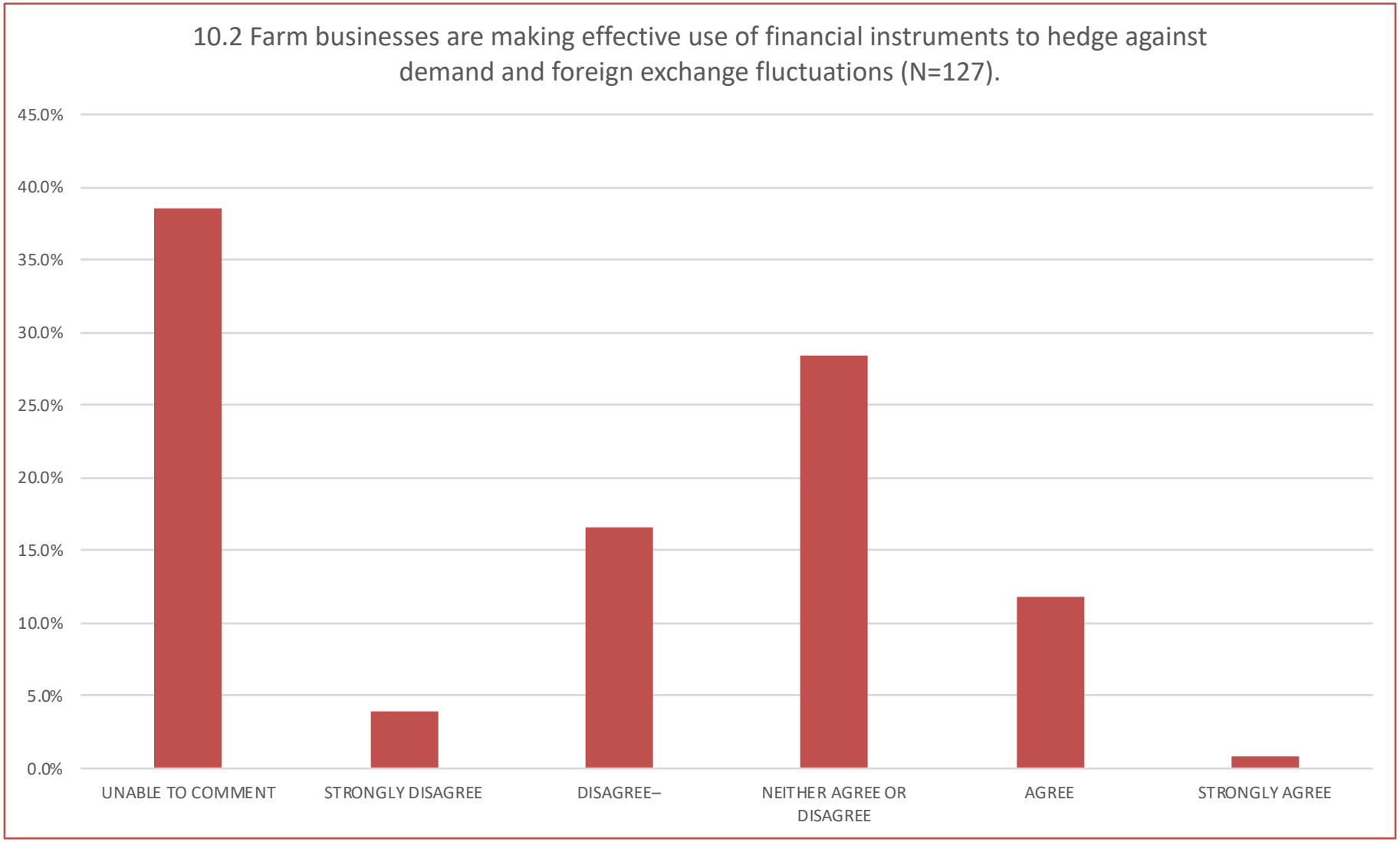
10.2 Farm businesses are making effective use of financial instruments to hedge against demand and foreign exchange fluctuations (N=127).
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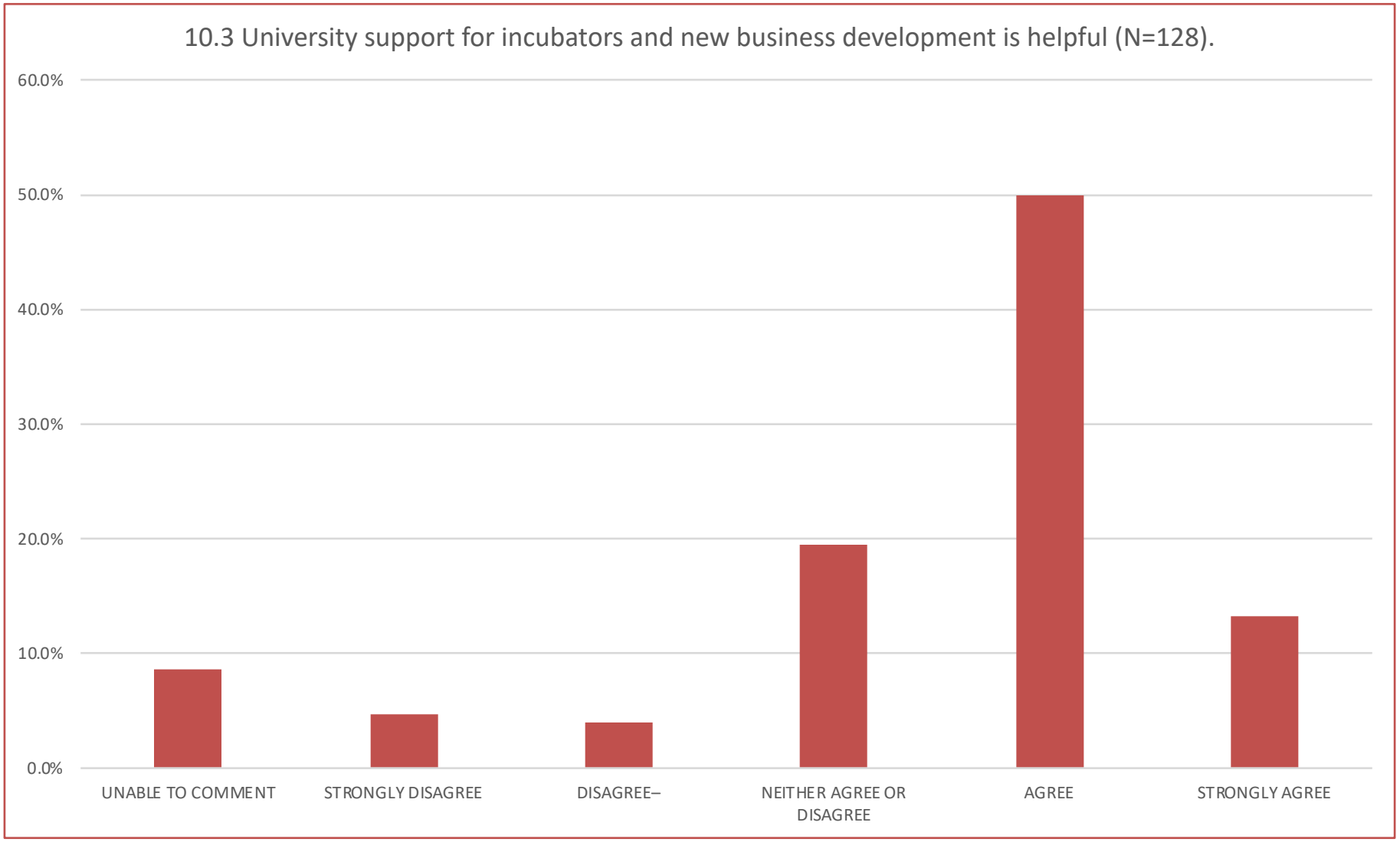
10.3 University support for incubators and new business development is helpful (N=128).
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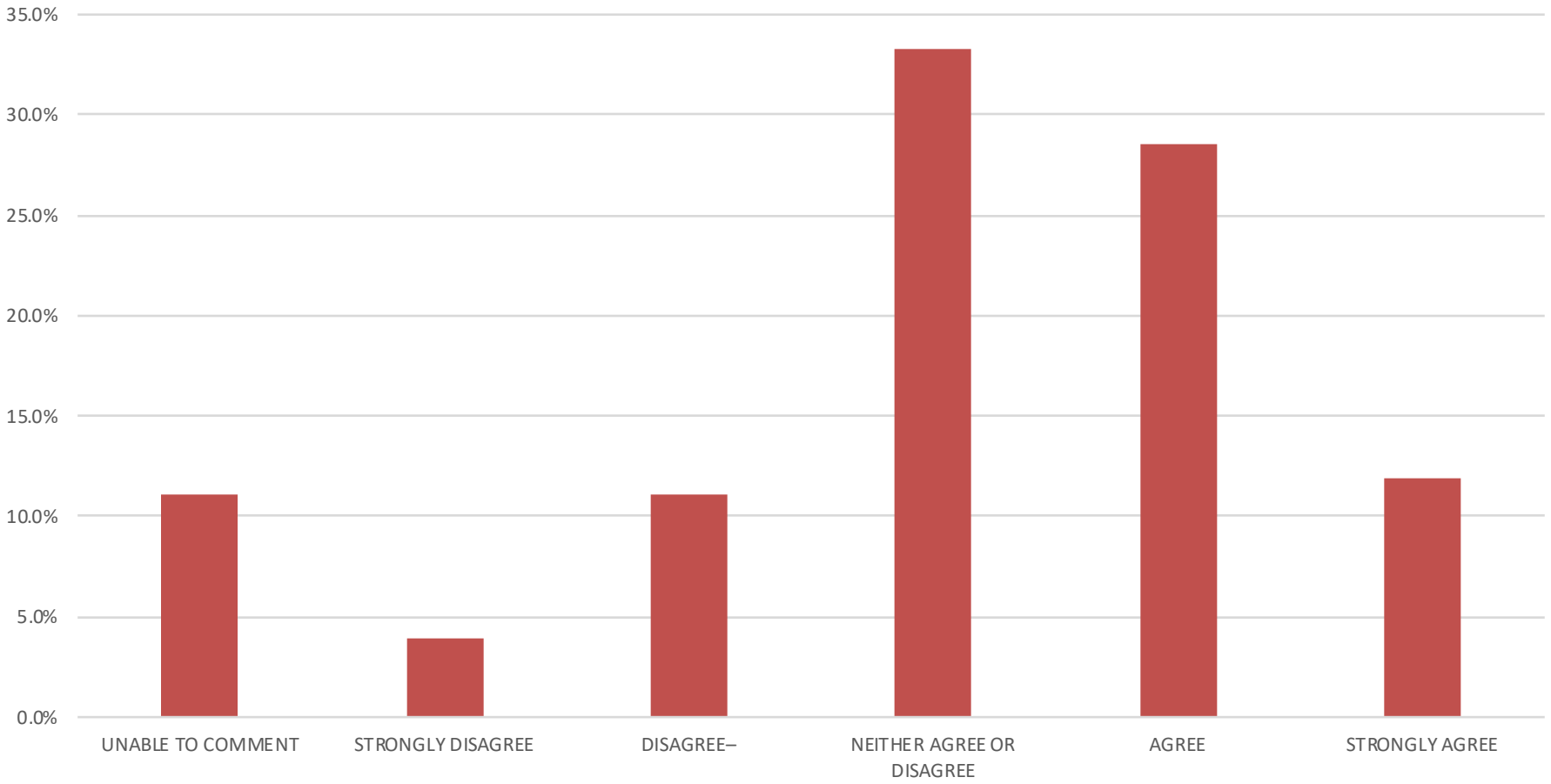
10.4 The rural innovation System is being “disrupted” with the emergence of new start-up agribusinesses, and a new style of leader with little connection to the established ‘agri-political’ system (N=126).



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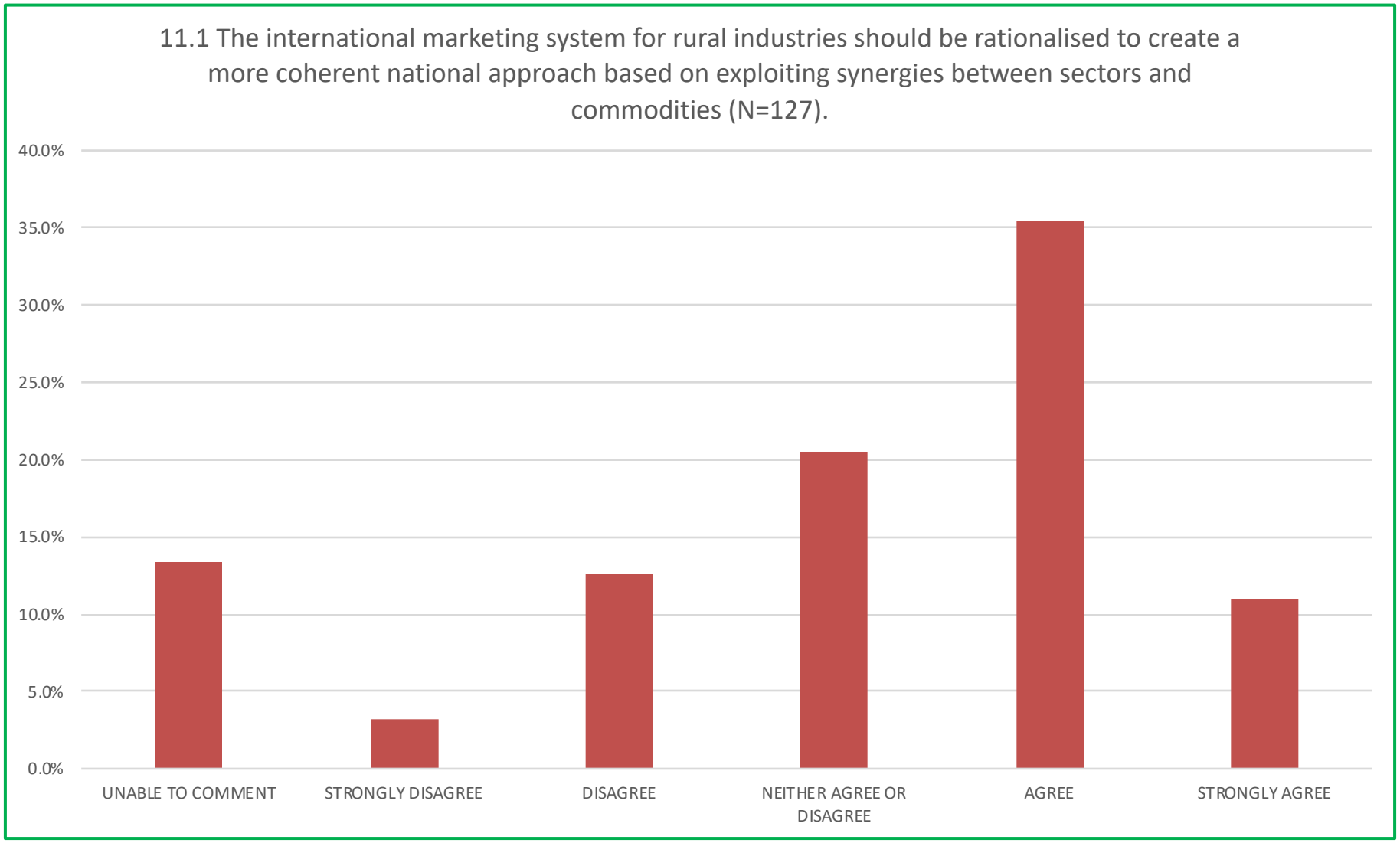
OTHER ISSUES


11.1 The international marketing system for rural industries should be rationalised to create a more coherent national approach based on exploiting synergies between sectors and commodities (N=127).
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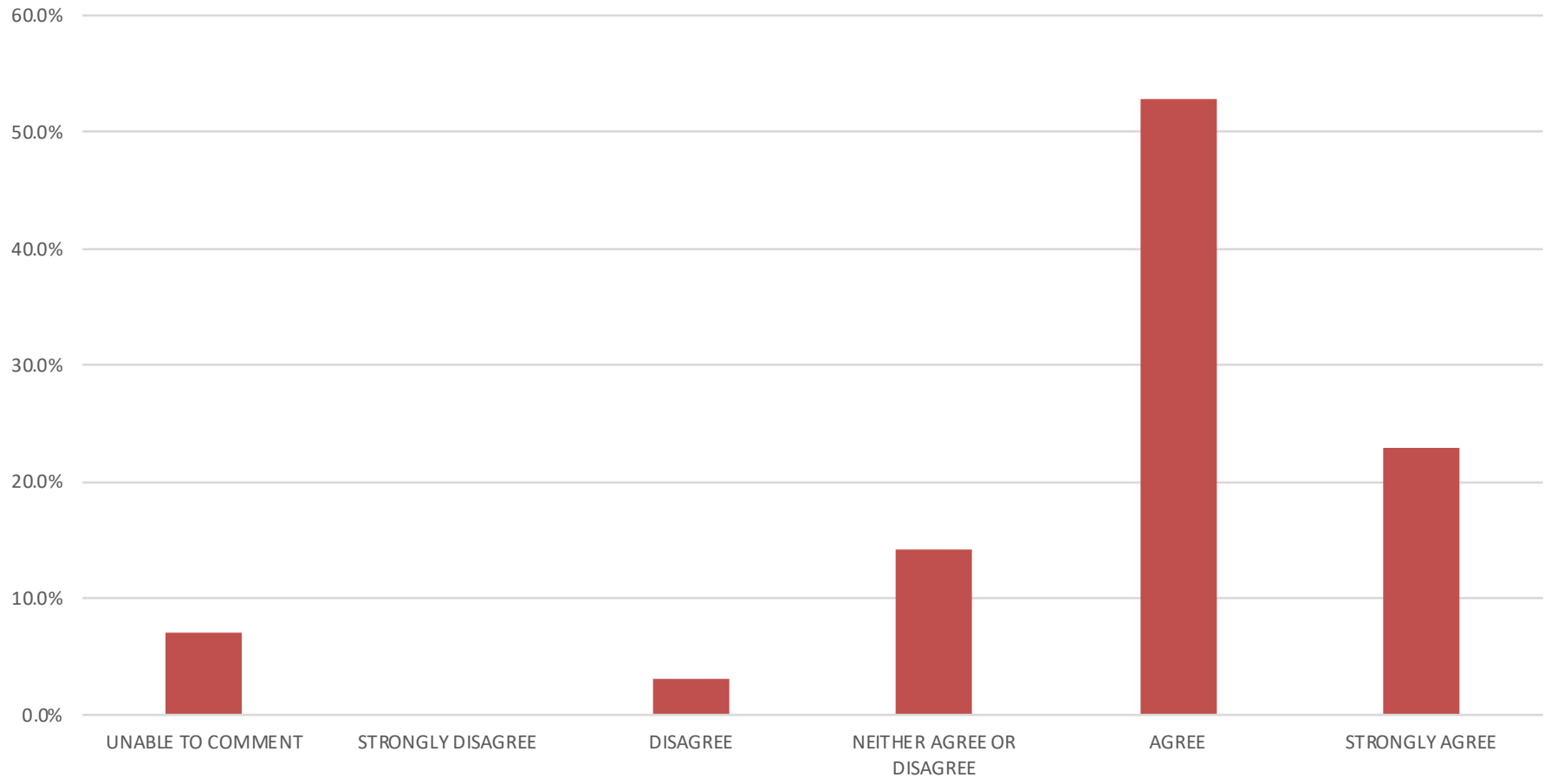
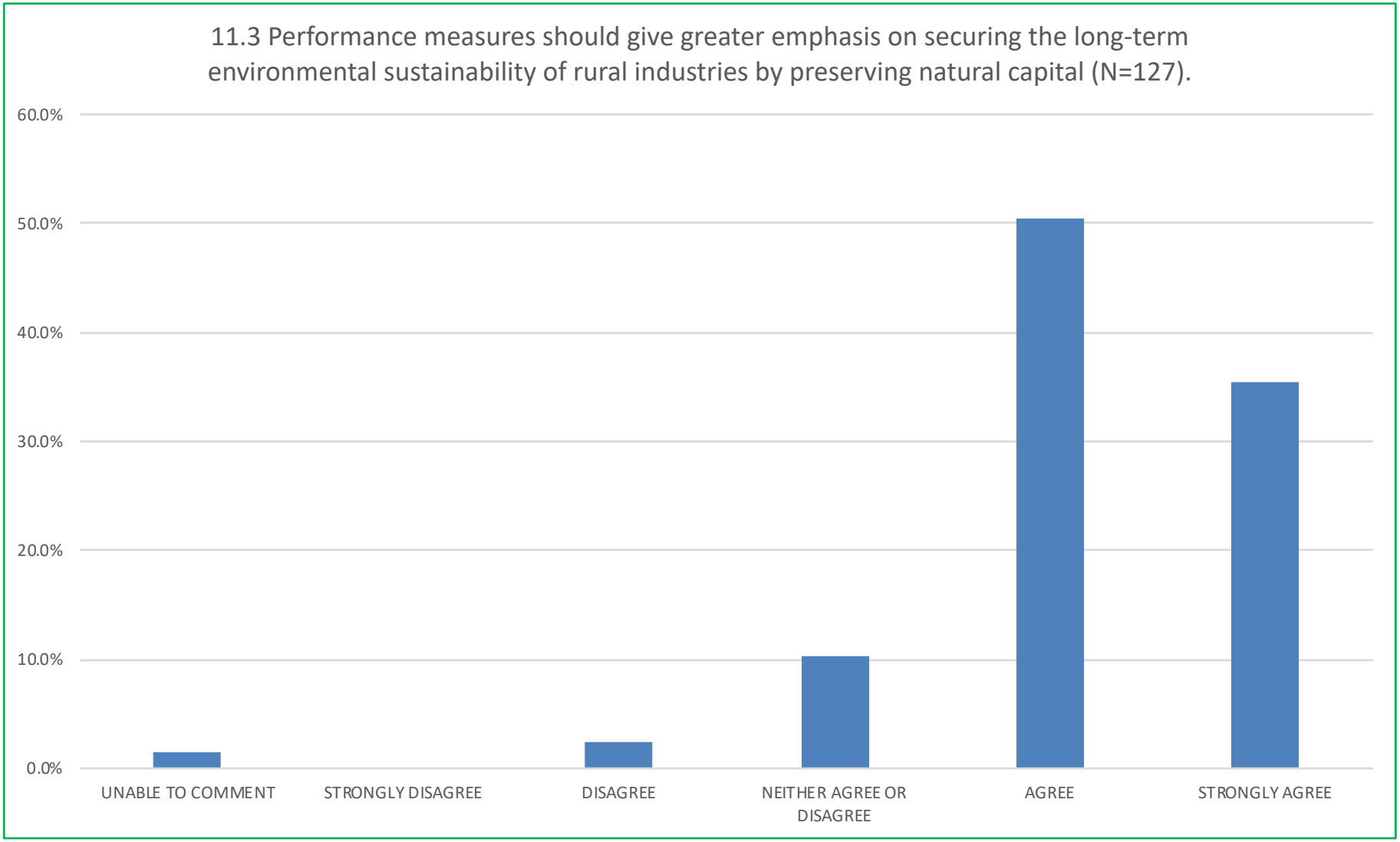
11.2 Performance measures should give greater emphasis on long-term industry impacts and the associated return-on-investment (including the transformational impacts achieved by start-ups) (N=127).




11.3 Performance measures should give greater emphasis on securing the long-term environmental sustainability of rural industries by preserving natural capital (N=127).
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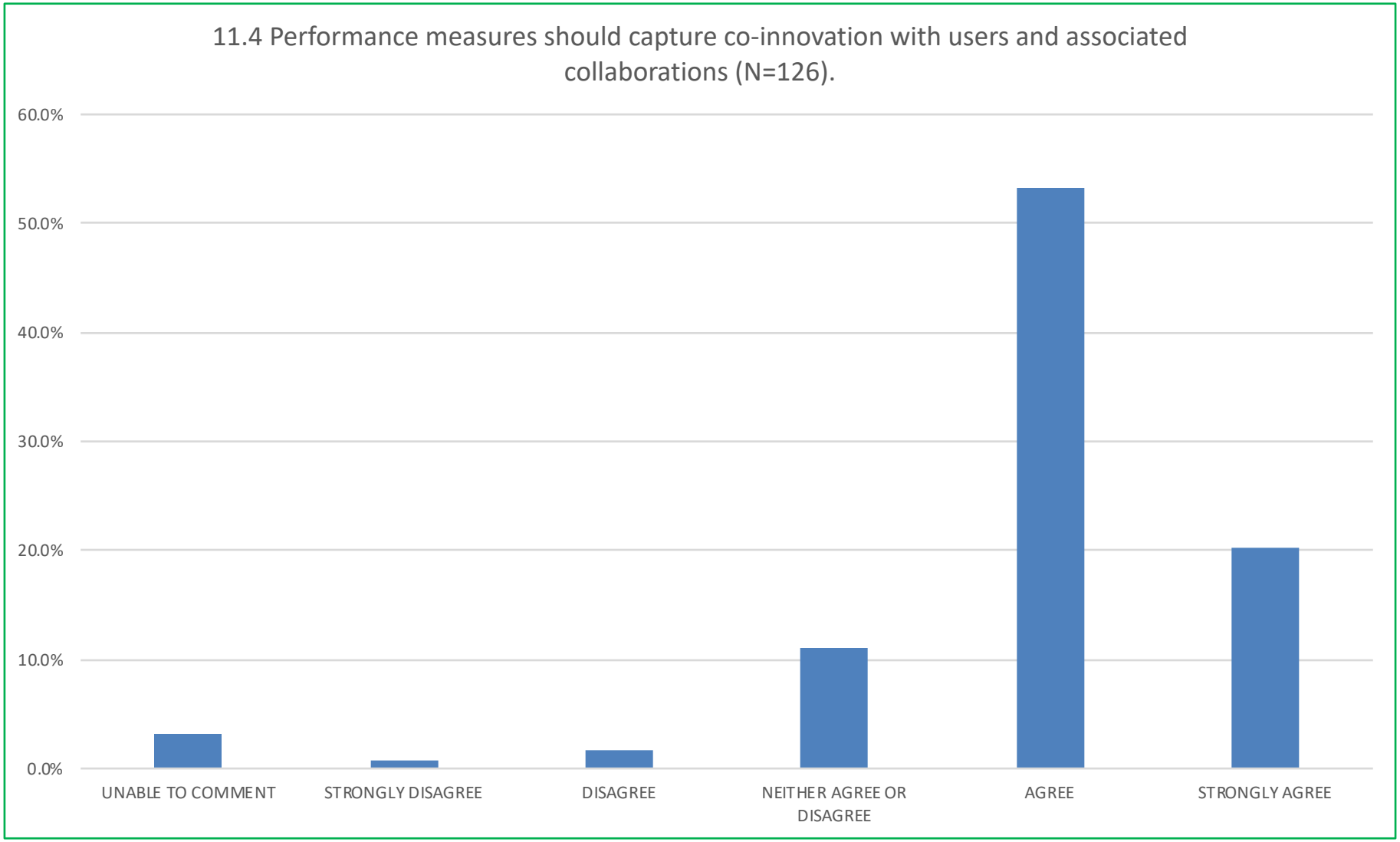
11.4 Performance measures should capture co-innovation with users and associated collaborations (N=126).
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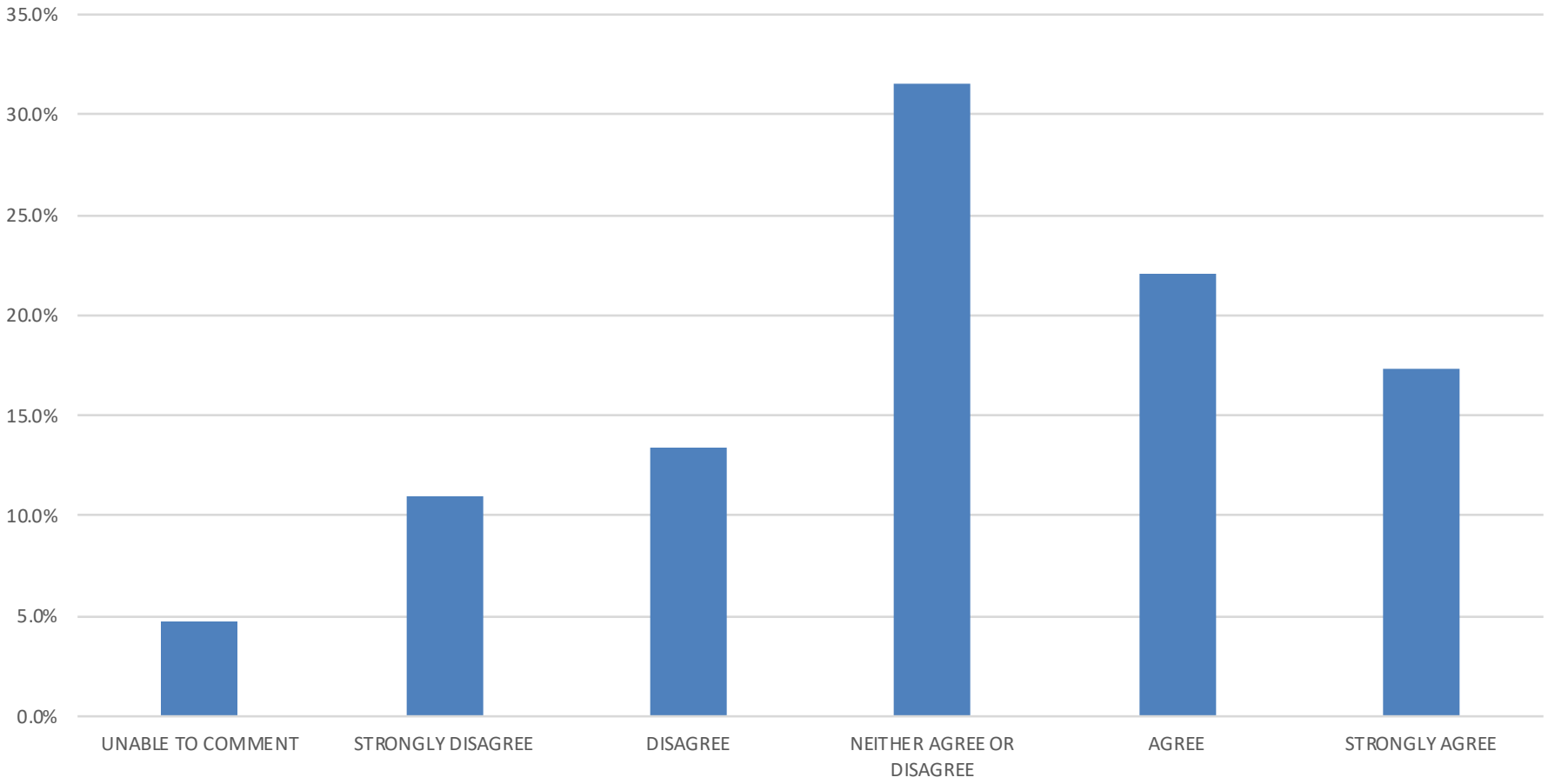
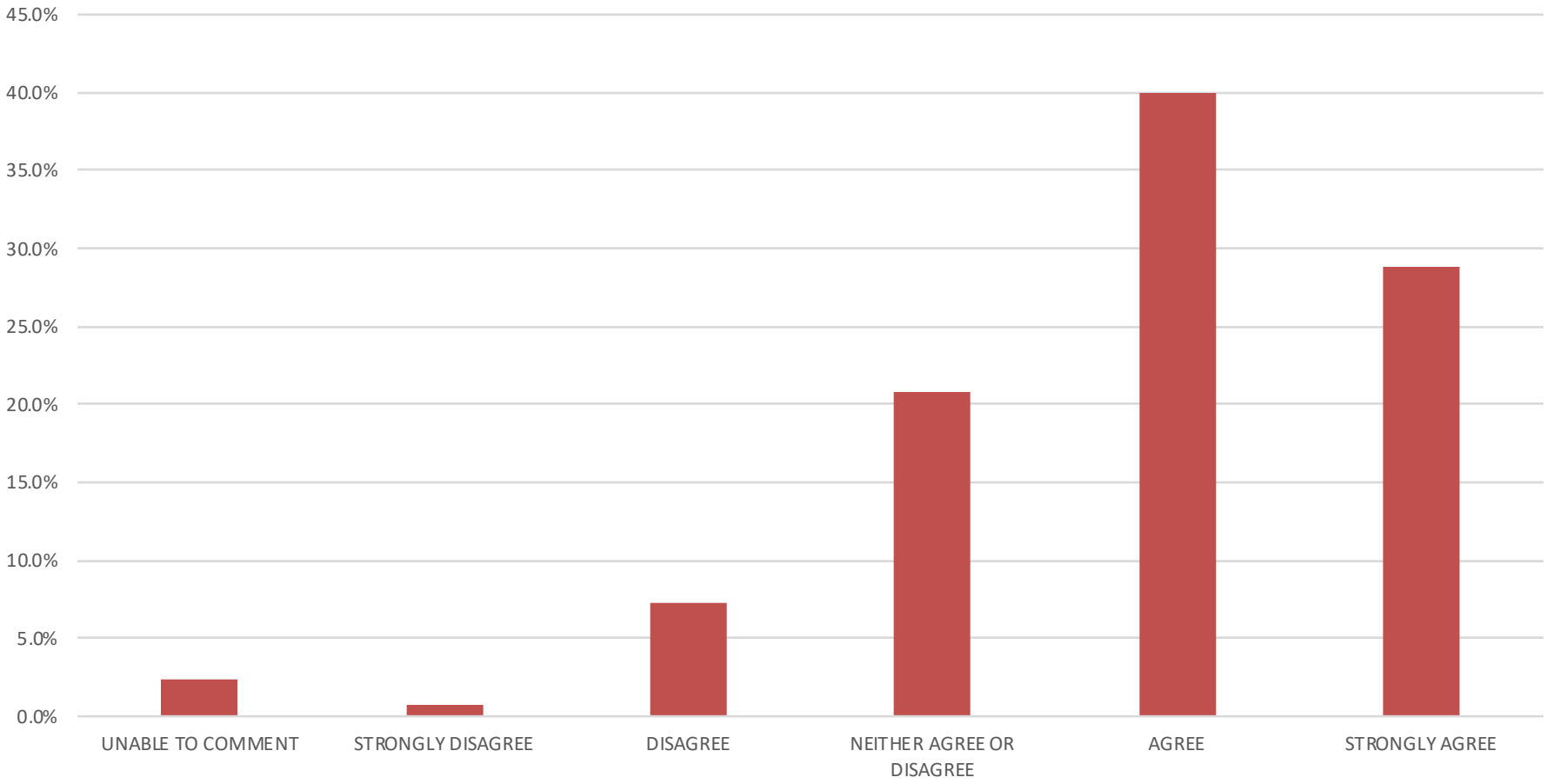
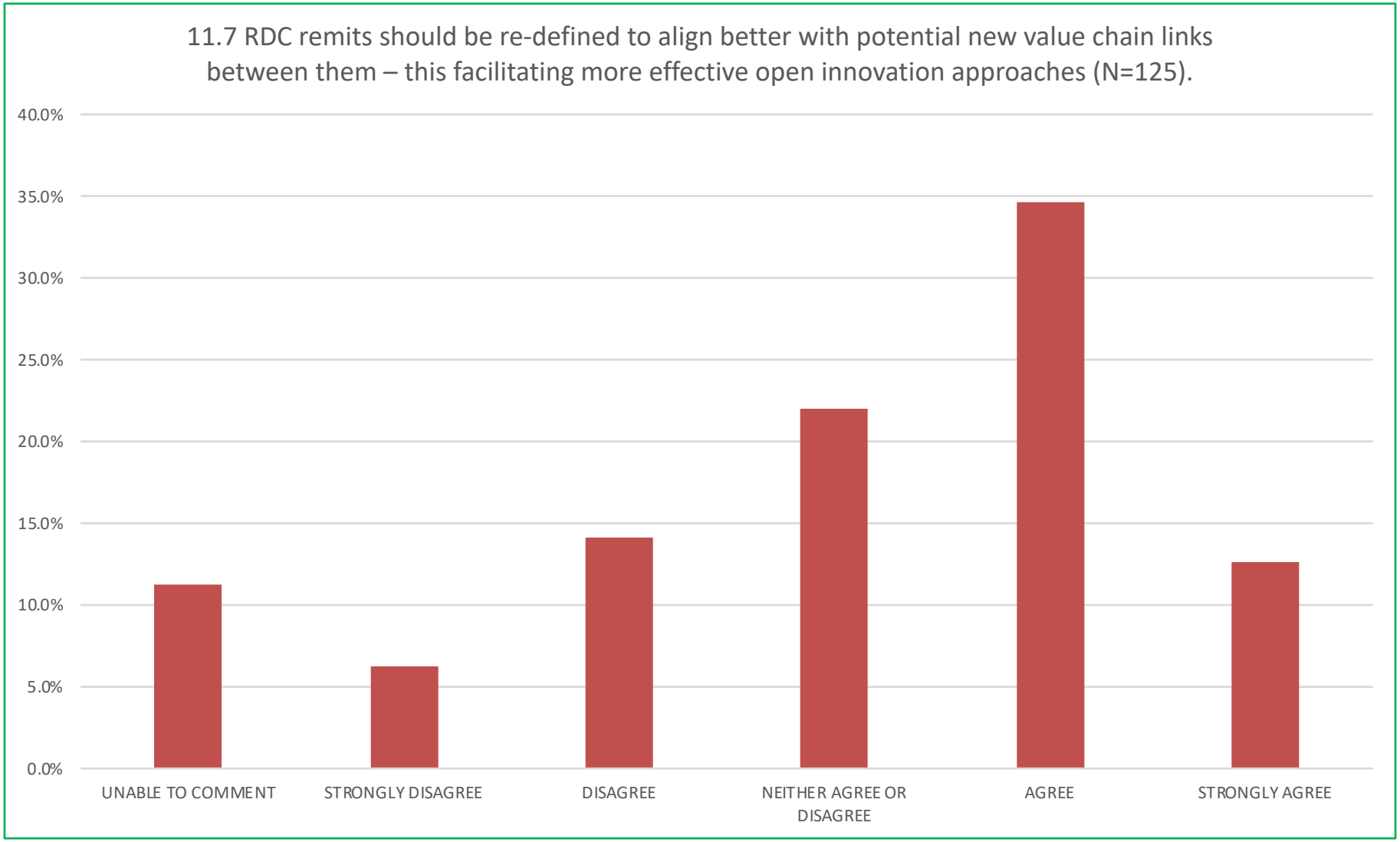
11.5 The return-on-investment from rural science and research investment would be enhanced by focusing on those start-ups able to export IP and know-how world-wide, rather than those focused mainly on improving local products and processes (N=127).



11.6 Rural science and research investment should adopt a stronger focus on innovation-related activities that help the potential adopters of new technologies to mitigate the risks faced when investing in new concepts and methods (N=125).




11.7 RDC remits should be re-defined to align better with potential new value chain links between them – this facilitating more effective open innovation approaches (N=125).
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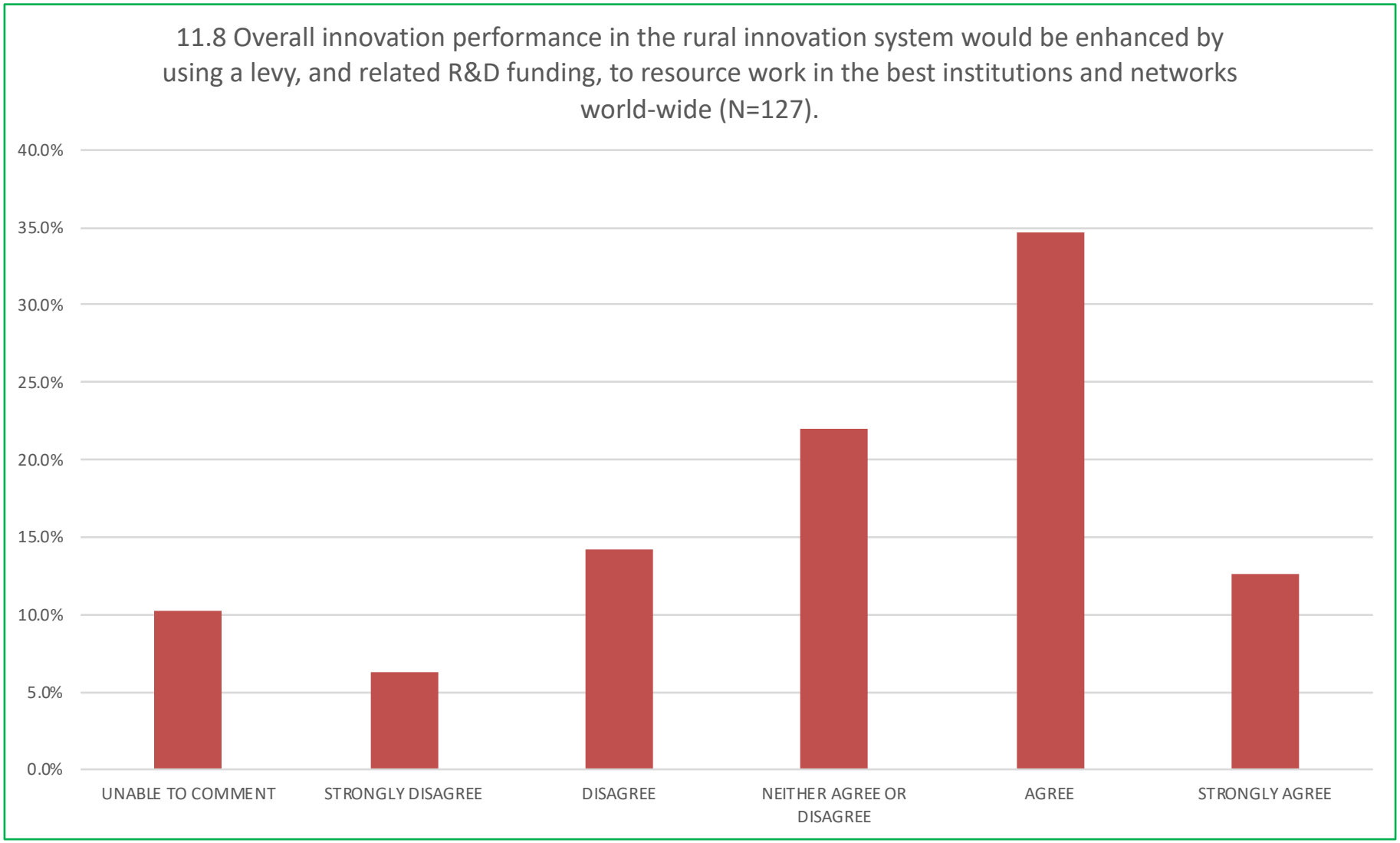
11.8 Overall innovation performance in the rural innovation system would be enhanced by using a levy, and related R&D funding, to resource work in the best institutions and networks world-wide (N=127).
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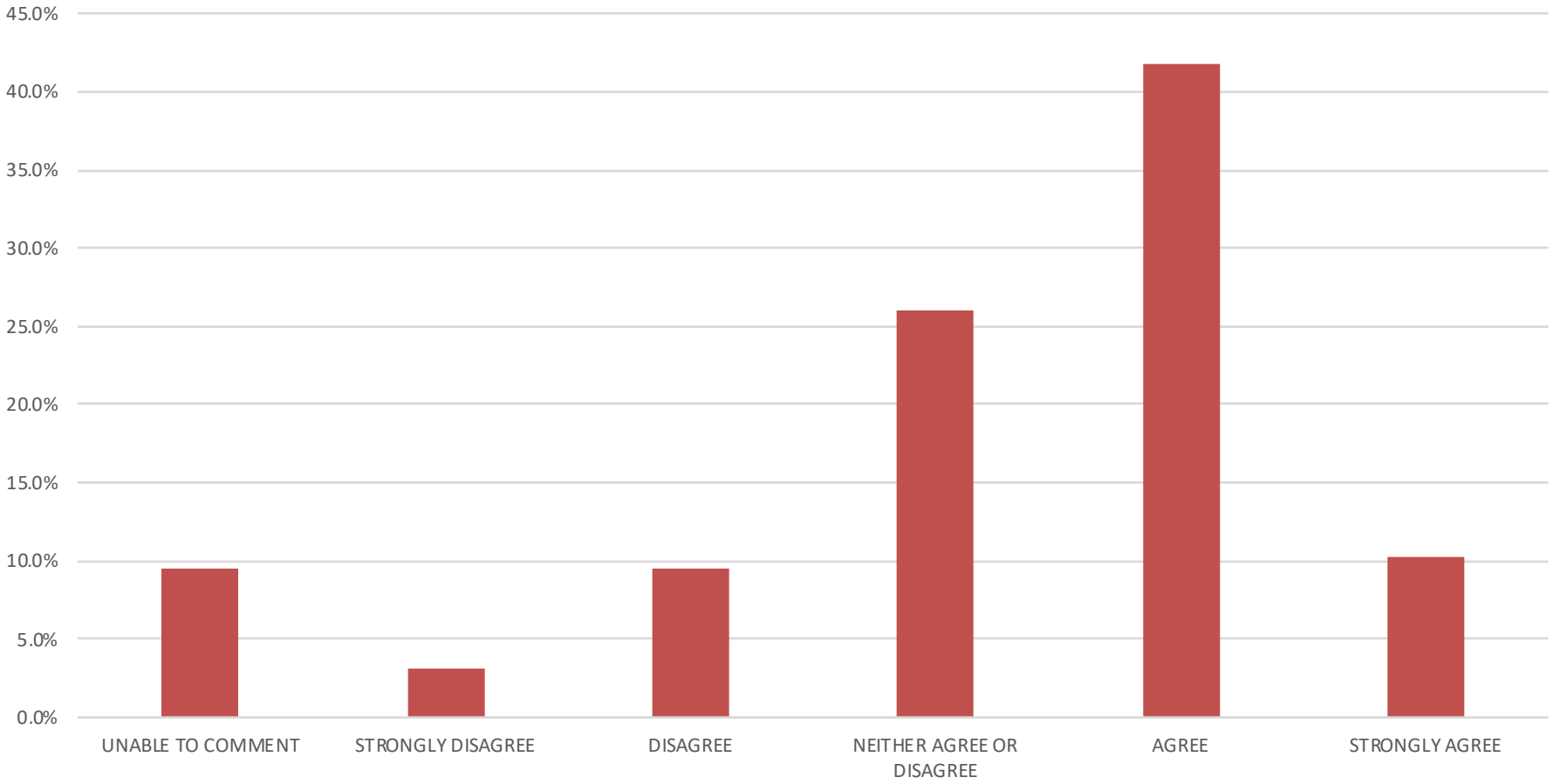
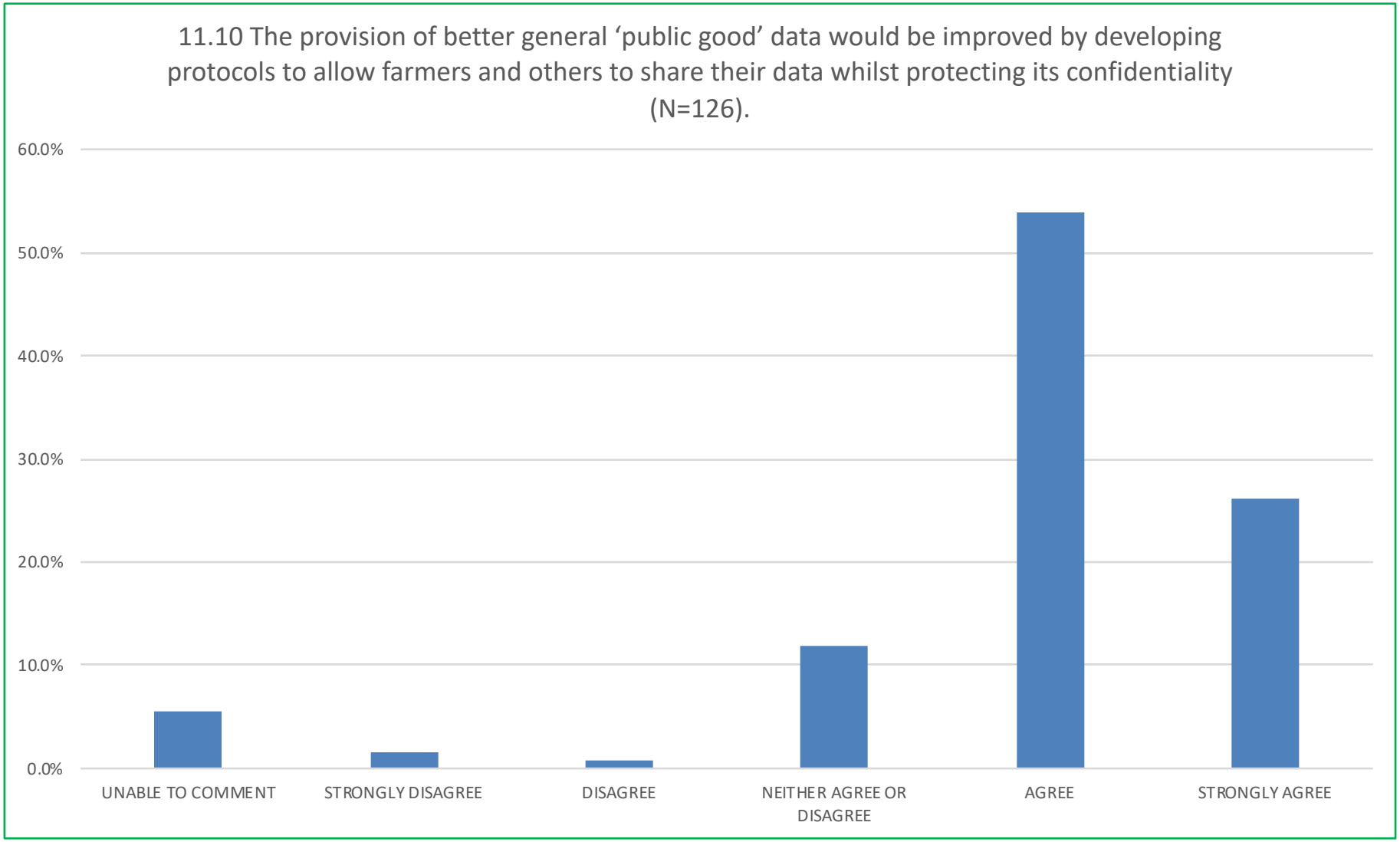
11.9 Overall innovation performance in the rural innovation system would be enhanced by placing a great emphasis on general 'public benefit' data provision relative to specific technology development projects (N=127).




11.10 The provision of better general 'public good' data would be improved by developing protocols to allow farmers and others to share their data whilst protecting its confidentiality (N=126).
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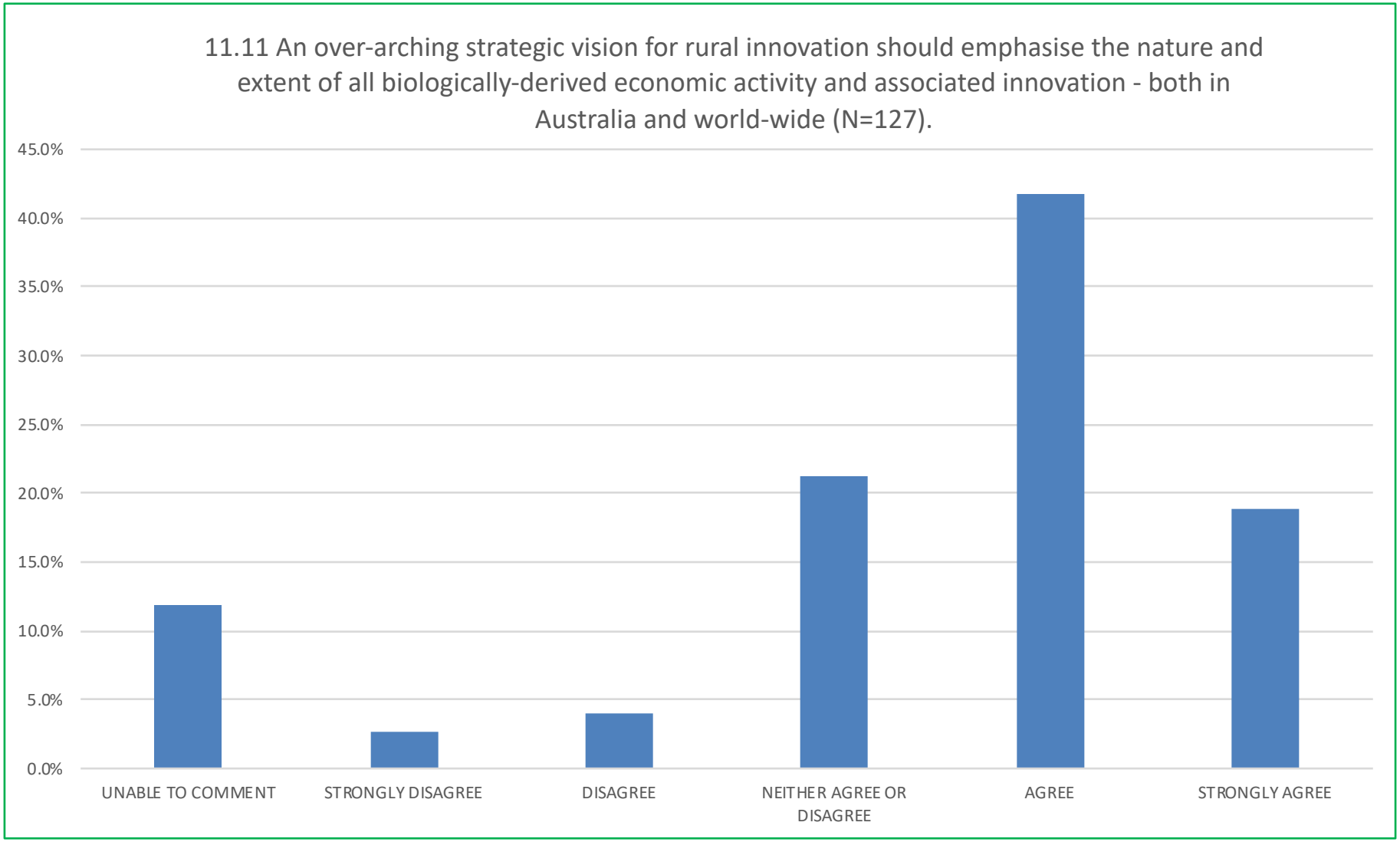
11.11 An over-arching strategic vision for rural innovation should emphasise the nature and extent of all biologically-derived economic activity and associated innovation - both in Australia and world-wide (N=127).
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11.12 An over-arching strategic vision for rural innovation should emphasise the potential for biologically-derived economic activity and associated innovation to assist in the transition to an environmentally sustainable 'circular economy' (N=127).