

14. Challenges to multi-agency and multi-stakeholder collaboration in innovation and enterprise policy

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14.1 INTRODUCTION

From a global perspective, enterprise and innovation policies are fundamental to governments in developing their economies. Enterprise policy encapsulates both entrepreneurship and small and medium-sized enterprise (SME) policy aimed at fostering business start-up and growth rates, which have long been associated with job creation and innovation (Arshed et al., 2014; Wapshott & Mallett, 2018). The popularity of the term ‘innovation policy’ is of relatively recent origin (Fagerberg & Hutschenreiter, 2020) and reflects growing recognition that knowledge and innovation are fundamental for national economic performance (Lundvall & Borrás, 2005). Innovation policies aim to explicitly link science, technology, and innovation with economic and employment growth. Recently, the traditional rationale for innovation policy has been expanded to contribute more explicitly to tackling societal challenges (Boon & Edler, 2018). Both enterprise and innovation policies have the common purpose of increasing economic growth while tackling societal challenges.

However, these policies are not without challenges. For example, in the UK, enterprise policy has been criticised as being ineffective in its formulation and implementation (Arshed et al., 2016; Niska & Vesala, 2013). Innovation policy within the UK has also had similar concerns: ‘There is no overarching responsibility for policy and no meaningful co-ordination... while the data required to monitor individual policy instruments is grossly inadequate’ (Connell, 2022). Thus, the UK government has taken note and sought to address these issues by bringing together local governments, third-sector and private stakeholders through City Region Deals (Elston & Bel, 2023). Evidence shows that by engaging in collaboration within multi-agency and multi-stakeholder networks, economies can flourish, services can be enhanced and equity can be

seen (Warner et al., 2021). Although these experiences highlight the positives of collaborations, such effective policies are scarce and conceal challenges.

This leads us in this chapter to unpack the challenges that multi-agency and multi-stakeholder innovation and enterprise policy networks face, using the six City Region Deals in Scotland as an illuminating case. Drawing on the existing network governance literature (for example Sørensen & Torfing, 2016), we focus on the tensions which influence the ability of regional innovation actors to generate effective collaborative policy. We outline and detail five key tensions: munificence versus coherence; input efficiency versus output efficacy; collaboration versus competition; specialist versus inclusive participation; and top-down versus bottom-up input. Furthermore, we offer a framework for effective regional collaboration amongst all innovation network actors involved.

14.2 UNDERSTANDING NETWORK GOVERNANCE IN REGIONAL INNOVATION AND ENTERPRISE POLICY

Strong networks are key facilitators of regional economic growth as they can foster innovation (Huggins & Thompson, 2014). As such, there is a growing body of research exploring the interactions, relationships, and linkages between regional actors that form innovation and enterprise (eco)systems and clusters (Huggins et al., 2018; Knox & Arshed, 2022). Here, the perceived ‘institutional thickness’ of a region is key, with a need for innovation-driven public and private sector entities to support SMEs (Rodríguez-Pose, 2013; Spigel, 2016). Additionally, the connections between the various actors in an innovation system are crucial, and calls have been made for policy to direct attention to strengthen this (Flanagan et al., 2011).

As such, the development of physical infrastructure, education, training, and enterprise support are seen as means to ensure conducive regional innovation environments (Pugh, 2017). Technology transfer offices and local and sector-specific support networks are also important for the development of innovation and entrepreneurship (Arshed et al., 2023; Huggins & Thompson, 2017; Knox et al., 2021; Pugh et al., 2018). However, policies and programmes that look to develop innovation and entrepreneurship through these means are frequently scrutinised for failing to generate economic growth (Brown et al., 2016; Harrison et al., 2020; Pugh et al., 2018). The functionality of multi-stakeholder networks has been highlighted as one of the reasons why such policies fail (Arshed et al., 2016; Pugh et al., 2018; Scheidgen, 2021). While multi-stakeholder configurations can co-create public value resulting in mutual benefits, this requires a level of alignment (Bailey et al., 2020). However, stakeholders have different motives and agendas, which can create tensions

and make alignment challenging in both the formulation (Autio & Levie, 2017) and implementation of policy (Arshed et al., 2021; Knox & Arshed, 2023a). This stresses the importance of effective regional innovation and enterprise governance to ensure economic growth.

By focusing on the ‘nature of relationships, linkages and networks that exist between regional actors’, a network governance framework can guide multi-stakeholder policy coordination (Huggins et al., 2018, p. 1295). Globally, network governance has emerged in response to the failure of central governments to address the most pressing policy problems and the unchecked externalities and inequalities that market-driven approaches create (Sørensen & Torfing, 2016). It is characterised by having openness, with rules for ‘collaborative’ operation unprescribed, which gives considerable freedom to stakeholders and diminishes government involvement (Laffin et al., 2014). Collaborative governance networks, therefore, can be defined as ‘a group of three or more interdependent cross-sector organisations that come together using collective decision-making practices for the purpose of achieving a specific public good or service, and in which conflicts are managed through repeat interactions which encourage and foster norms of trust and reciprocity’ (Smith, 2020, p. 168).

Provan and Kenis (2008) highlight three modes of network governance. *Participant governed*, which have no unique coordinated entity and are entirely informal and driven from the bottom-up. *Lead governed* networks are coordinated by large powerful actors and have a clearer relationship hierarchy. *Network-administered forms* have managerial entities that coordinate and play the role of ‘brokering’ the network. Various relational and structural factors influence the means by which different networks are governed. This includes cultural norms and informational flows (Cabanelas et al., 2017); and the authority, trust, and legitimacy of stakeholders, which can create unequal power relations (Klijn & Koppenjan, 2012). Imbalance or failure to manage these factors can lead to coordinating tensions between the stakeholders within a network, resulting in inefficiencies in the design and delivery of policy.

14.3 ILLUSTRATIVE CASE: SCOTLAND AND CITY REGION DEALS

City Regions Deals emerged as a solution to the uneven economic development that is present across UK regions (Deas, 2014; Etherington & Jones, 2018). Beyond the extensive financial investment, these deals also aim to secure effective governance with more open civil society arrangements that promote inclusive growth (Etherington & Jones, 2016; Houston et al., 2021; Martin, 2015). The deals are effectively tripartite agreements between local authorities, devolved governments, and the UK Government. However, each deal

varies in terms of size and the number of local authorities that are involved, often also including economic development agencies and universities (Waite et al., 2018). Table 14.1 presents an overview of city-regions in Scotland and background information on business activity, while Figure 14.1 highlights the city deal areas.



Source: © University of Dundee 2023

Figure 14.1 City Region Deal areas in Scotland

Table 14.1 Overview of city regions in Scotland

City Region Deal	Glasgow	Edinburgh	Aberdeen	Tay Cities	Inverness	Stirling
Lead city population	612,040	506,520	213,224	148,210	46,870	37,700
No. of local authorities	8	6	2	4	1	2
Approx. deal size	£1.2 billion	£1.3 billion	£550 million	£700 million	£315 million	£215 million
Number of businesses per 10,000 population	275.8	332.7	332.7	333.6	484.5	354.4
Business birth rate per 10,000 population	35.2	37.5	37.5	35.5	41.2	39.9
Business expenditure on R&D per head (£)	94.0	271.8	271.8	133.4	128.4	61.3

Source: Scottish Centre for Regional Inclusive Growth (<https://www.inclusivegrowth.scot/tag/data/>)

Each deal in Scotland has a different aim, but the general focus is on developing infrastructure, welfare, and innovation (Waite, 2016). Across each deal region, different socio-economic challenges exist, and deal stakeholders have different aims and reactions to address these challenges. A summary of these is presented in Table 14.2. While the governance structure of each deal is slightly different, generally there is an oversight joint commission with representatives from public and non-public forums, a central management unit with specific project teams, and open forums for stakeholder participation. This governance structure acts as the network administrator, whose role is to ‘broker’ the deal through ensuring integration, accountability, and participation.

14.4 COORDINATING TENSIONS IN SCOTLAND’S CITY-REGIONS

14.4.1 Munificence Versus Coherence

This tension refers to the balance between having munificent stakeholder involvement versus maintaining organisational coherence. Resource munificence is regarded as a key determinant for vibrant innovation and enterprise regional systems (Hruskova et al., 2023; Spigel, 2016). In sparser regions, as evident particularly in ICR and SCR, more stress is placed on public policy interventions to develop innovation (Huggins et al., 2018). However, in these regions with fewer players, it is easier to maintain coherence and align agendas. In munificent regions, maintaining cohesion and complementarity while reducing replication is a challenge (Motoyama & Knowlton, 2017).

This tension was mainly present in the larger deal regions (GCR, ECR, TCR) where there were more actors and organisations involved. On the one hand, there was an abundance of stakeholders that needed to be considered for Deal activity. On the other hand, Deals would need to maintain a sense of coherence in their organising activities. Munificent collaborations can bring more resources, expertise, and benefits to the table. Coherence can ensure transparency, alignment, and prevent mission drift.

14.4.2 Input Efficiency Versus Output Efficacy

This tension refers to balancing the procedures and administration required to organise the deals (inputs) with the focus on the efficacy of project delivery (outputs). The effectiveness of how policy collaborations are organised is important to facilitate trust and stability which can enhance policy outputs (Knox & Arshed, 2022; Smith, 2020). Poor organisation and poor communication between multiple stakeholders can lead to poor implementation of policy (Arshed et al., 2016; Huggins et al., 2018).

Table 14.2 Summary of City Region Deal policy challenges, aims, and actions

City Region	Main challenge	Policy aims	Policy actions
Glasgow (GCR)	Economic and political uncertainty affecting markets.	<ul style="list-style-type: none"> • Attract and retain talent and enterprises. • Grow specific sectors. • Increase investment, innovation, and exporting. • Increase high-growth start-ups. 	<ul style="list-style-type: none"> • Develop innovation districts and export hubs. • Develop new office spaces and business incubators. • Establish a Flexible Skills Investment Fund. • Unify business support services through a Regional Enterprise Hub. • Incentivise SME development through revised procurement frameworks.
Edinburgh (ECR)	Slowing productivity, skills shortage, and uneven wealth distribution.	<ul style="list-style-type: none"> • Develop talent through new programmes. • Expand regions' research activities. • Adopt data-driven approaches in public, private, and third sector. • Increase capacity for data storage, analysis, and access. • Enable data-driven high-growth businesses. 	<ul style="list-style-type: none"> • Five innovation research, development, and innovation sectoral hubs. • Commercial collaboration space and manufacturing space. • Investment programme in neighbouring regions. • Regional employability and skills programme.
Aberdeen (ACR)	Oil and gas downturn and job losses.	<ul style="list-style-type: none"> • Sector diversification. • Job retention. 	<ul style="list-style-type: none"> • Develop world-leading oil and gas technology centre. • Innovation hubs (including office space, incubators, laboratories, accelerator programmes) for digital, food and drink, and life sciences.

City Region	Main challenge	Policy aims	Policy actions
Tay Cities (TCR)	High levels of regional unemployment.	<ul style="list-style-type: none"> • Reduce levels of unemployment. • Grow specific sectors. • Increase business creation and survival. • Invest in research, innovation, collaboration, and connectivity. 	<ul style="list-style-type: none"> • Innovation hubs and business centres. • Co-working spaces, maker labs, incubators, and accelerator programmes. • Create International Trade and Investment Partnership and implement a Tay Cities Region Industrial Investment Programme.
Inverness (ICR)	Retention of high-skilled young people and connectivity.	<ul style="list-style-type: none"> • Retain young people. • Job creation. • Up-skill the labour market. • Improve productivity and innovation of businesses. 	<ul style="list-style-type: none"> • Develop digital infrastructure. • Develop innovation and incubation hubs and networks promoting life sciences and health sectors. • STEM/D learning centres. • Accelerator and training programmes, maker space and co-working spaces for tourism, creative, life science, and food and drink. • Increase R&D activity of UHI.
Stirling (SCR)	Community inequalities in wealth, health, education, and employment.	<ul style="list-style-type: none"> • Create conditions for businesses to be more resilient. • Improve access to skills, education, and training opportunities. 	<ul style="list-style-type: none"> • Innovation hubs, research centres, and business incubator. • Digital community network hubs for students, businesses, academics, and mobile workers. • Develop skills, knowledge, and training ecosystem.

This was more clearly present in both the larger deals and the smaller deals, but less so in medium-sized deals. On the one hand, having an efficient organising process was important to ensure stakeholder alignment. On the other hand, too much focus on organising detracted from delivering projects. In the larger regions, efficient organising processes and stakeholder alignment took longer to achieve due to having a greater number of organisations involved in the deal. Likewise, in smaller regions, the resource capacity for ensuring effective procedures was lacking, which also created challenges. Both TCR and ACR had a longer history of collaborative work to deliver policy, which made efficient organisation easier and allowed for a quicker focus on delivery.

14.4.3 Collaboration Versus Competition

This tension refers to the challenge of balancing individual and collective interests. Within the existing literature, competition between interdependent stakeholders can be regarded as disruptive to multi-stakeholder collaborative governance, leading to fragmentation, duplication, and disruption (Hruskova et al., 2023; Knox & Arshed, 2022; Scheidgen, 2021). While competition, to varying degrees, was evident between stakeholders across all regions, the ability of regions to manage this tension led to more inclusive collaborations and the maintenance of the governance network.

On the one hand, each deal member would look to protect their own agenda and preserve their autonomy. On the other hand, collective interests could be best served through collaboration. The propensity towards collaboration between partners was institutionally embedded and had been fostered over potentially decades of working together. In the TCR and ACR regions, partnership working was more common than across other regions.

14.4.4 Top-Down Versus Bottom-Up Input

This tension refers to the balance of input from National Government funders conflicting with local or regional autonomy. This tension is widely reported in regional policy governance across the UK, with some highlighting that power remains central (Gherhes et al., 2020), while others say that it offers an alternative to the 'one size fits all' central mandate (O'Brien & Pike, 2019).

Across City Deals, the National Government had certain procedures and terms which needed to be satisfied and incorporated within deal organisation. The national policy agenda that would need to be considered by regional teams was sometimes viewed as being restrictive. Typically, Local Authorities and sub-regional deal partners were trusted entities with accountability processes and had a closer to-the-ground perception of local needs. Capacity was a key issue here, as local partner resources influenced regional partners' ability to

administer the deal with less support from the National Government. Larger deals also aligned more with the existing national agenda, highlighting the exclusion of rural regions and the propensity of national policy to be dominated by an urban agenda (Harrison & Heley, 2015).

14.4.5 Specialist Versus Inclusive Participation

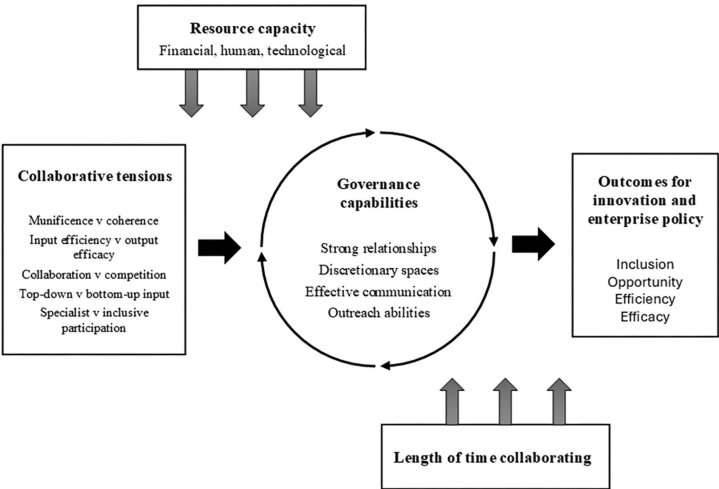
This tension refers to a trade-off between developing specialist technology and innovation activity and ensuring that the benefits and participation in these projects are distributed equally. This tension relates to inclusive economic growth and how intra-regional inequalities can be effectively tackled through policy intervention (Hughes & Lupton, 2021). On the one hand, developing technology, innovation, research and development was viewed as ensuring regional competitiveness and attracting high-value jobs, skills, and businesses. On the other hand, there were concerns that the benefits of this activity were not being delivered to local communities. Effectively, partners would need to conduct extensive community planning to ensure balance. This was particularly prevalent in the larger investment deals, where a significant amount of money was being spent on developing innovation and technology with large innovation centre projects.

There is a trade-off between developing large-scale innovation and technology research projects that are of national and international importance (for example ECR data centre being touted as the 'data capital for Europe'), with more inclusive community innovation spaces that can address local challenges (for example ECR having extensive fluctuations in poverty across the region). While the larger regions can afford to focus on national and international agendas, smaller deals have a more specific focus on community challenges and inclusion (Boon & Edler, 2018; Uyarra & Flanagan, 2010).

14.5 MANAGING TENSIONS AND IMPLICATIONS FOR POLICY

These five tensions inherent in multi-stakeholder innovation and enterprise collaborations, illustrated within the context of City Region Deals in Scotland, represent significant challenges for effectively coordinating innovation and enterprise policy. These tensions varied in their severity across regions, given the complex system of local policy actors involved in the policy process and the heterogeneous nature of Deal objectives (summarised in Figure 14.3). In this section, we present a framework for managing these tensions and discuss implications for policy (presented in Figure 14.2).

There are two important underlying factors that influence the severity of coordinating tensions. The first is the capacity of partner organisations to



Source: Author’s own

Figure 14.2 Framework for managing tensions in innovation and enterprise policy networks

City Region	GCR	ECR	ACR	TCR	ICR	SCR
Munificence versus coherence	X	X		X		
Input efficiency versus output efficacy	X	X			X	X
Collaboration versus competition	X	X			X	X
Top-down versus bottom-up input			X	X	X	X
Specialist versus inclusive participation	X	X	X			

Figure 14.3 Summary of tensions in case regions

manage collaborative activities and is fundamentally an issue with resource allocation (Waite et al., 2013). The larger Deals, regarding financial and human resource commitments, had bigger pools to draw from and were therefore able to invest more in governance capacity. Conversely, the smaller regions had more limitations regarding the amount they could invest in governance. The second underlying factor is the time needed to develop the governance capabilities that are required to effectively manage coordinating tensions. These are effectively embedded within the history of a region, with those having a track record of collaboration able to plan and implement new policies more effectively (Wolfe, 2010). For regions that did not have a history of collaboration, a period was needed for effective governance practices to become embedded.

Key to effective network governance is the role of the governance body, which ‘brokers’ activity between partners and recognises opportunities for regional development (Beer et al., 2023; Knox & Arshed, 2022). However, this governing body needs to develop the capabilities and the capacity to do so (Grillitsch & Sotarauta, 2020; Kitagawa & Vidmar, 2023; Nelles, 2013). Capabilities loosely relate to the assets, infrastructure, strength of networks, and skills and knowledge that exist within a region. Within the collaboration of innovation and enterprise policy, four key pillars play an important role in developing governance capabilities: strong relationships, effective communication, discretionary spaces, and outreach abilities.

- Having strong-tie relationships is important for developing trust between network actors (Kauffeld-Monz & Fritsch, 2013). Strong relationships between network actors can facilitate the exchange of knowledge, increase engagement in coordinating activities, and incentivise the sharing of resources (Knox & Arshed, 2022; Nelles, 2013).
- Effectively managed relationships in a network balance a collective agenda between actors but also allow for discretionary space for actors to deliver local services effectively in line with their individual interests and expertise (Autio & Levie, 2017; Klijn & Koppenjan, 2012).
- Effective communication processes are important for the internal organisation of an innovation and enterprise policy network as they can help to facilitate trust and the sharing of information (Kania et al., 2014).
- Finally, having effective community outreach and engagement is important to ensure both the participation of wider stakeholder groups in decision-making and to warrant that the benefits of policies are distributed throughout a region (Lee, 2019).

These pillars can assist in generating situated value in the delivery of innovation and enterprise policy (Arshed et al., 2016; Knox & Arshed, 2023a). This

includes the inclusion and distribution of benefits to wider regional communities that are often left behind through innovation and enterprise policies; further opportunities for regional development from wider policy initiatives and funds; effective governance processes that reduce public costs and maximise value; as well as improvements in the efficacy of policy delivery.

To maximise these positive outcomes, several actions can be taken by the government and collaborative partners. These can include:

- Allocating seed funding for initial capacity building in resource-sparse regions where there is scarcity, fewer anchor institutions, and less history of collaborative work.
- Deliberating a 'mix' of large technology and research development policies with local-based community innovation and enterprise policies. Ensuring the distribution of funding for this is relatively equal.
- Embedding inclusion within collaboration by pairing large anchor institutions (such as universities) with smaller community-led organisations to work together.
- Facilitate trust and open access to networks through the frequent organisation of events to encourage participation.
- Evaluating policy funding bids based on the longevity of proposed outcomes and capacity beyond short-term delivery.

14.6 CONCLUSIONS

Despite the emergence of collaborative governance approaches to deliver innovation and enterprise policy within regions, limited understanding of the inherent challenges and how to overcome these has been provided in the current literature. The tensions are an inevitable feature of multi-stakeholder governance networks and need further attention. Research is needed to understand how governance capabilities are facilitated, and efforts to develop strategic tools for assessing regional needs can be particularly useful in helping overcome these tensions (Kitagawa & Vidmar, 2023; Knox & Arshed, 2023b). Understanding how to develop regional capabilities to generate 'long-term' and inclusive regional growth can be of great interest to policymakers and collaborative governance networks.

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