

THE STRATEGIC INTEGRATION OF SKILLS & INNOVATION POLICY IN NORTHERN IRELAND: AN INTERNATIONAL SMALL ECONOMY PERSPECTIVE

EXECUTIVE SUMMARY

David Skilling

Prepared for the Department for the Economy, Northern Ireland

EXECUTIVE SUMMARY

This report describes the way in which skills policy and innovation policy in small advanced economies is designed, and in particular the way in which skills and innovation policy is integrated. It draws on this international small economy experience to identify a series of policy implications for Northern Ireland.

The global context

Global dynamics

Skills and innovation has long been at the core of economic growth in advanced economies. And looking forward, the importance of skills and innovation policy will continue to increase. The increasing pace and intensity of technological change and international competition are creating substantial new challenges and opportunities for the skills and innovation system in advanced economies. Skills and innovation capability will increasingly shape national economic performance. Consider four core drivers of change that will impact on skills and innovation outcomes and policy in advanced economies.

- *The impact of disruptive technologies on the future of work:* Labour markets around the world are expected to be disrupted by a range of new technologies, such as automation, 3D printing, artificial intelligence, and so on.
- *Skills biased technical change:* Highly-skilled people will likely benefit from new technologies, but people in the middle of the skills distribution with jobs that can be routinised are at risk from these technologies.
- *Changing nature of globalisation:* Trade growth is increasingly dominated by knowledge intensive sectors: advanced industries, commercial services, and so on. Higher capabilities in skills and innovation will lead to increased specialisation in advanced technology industries, which have tended to grow relatively quickly.
- *Intense global competition:* Advanced economies have dominated knowledge intensive industries. But innovation is increasingly global in nature, with more intense competition from China and other emerging markets.

International policy responses

There is significant policy activity in many advanced economies with respect to skills and innovation as governments seek to position their economies to capture opportunities and manage risks associated with these global dynamics. There are several common policy themes:

- *Increased focus on ongoing training:* The traditional linear model of education, where education is concentrated at the start of the career (school, university, or technical education) is seen to be insufficient given the rapid pace of change in technologies and business models. It is increasingly important for people to be able to acquire new or upgraded skills on an ongoing basis through their career.
- *Connecting skills and industry:* Despite unemployment in many countries, employers commonly report skills shortages. This indicates that the market is not working effectively in many economies to match skills supply and skills demand. Particularly with an increasing pace of technological and business model change, attempts are being made to better connect skills and industry.
- *Coordination of skills policy across multiple domains:* A whole of government approach is needed to coordinate education, training, labour market, migration, and other policies affecting the development and use of skills. For example, policy can address the risks associated with investing in skills through providing social insurance or active labour market policy.
- *Innovation:* Many governments (and firms) are increasing their commitment to R&D and innovation. As with skills, innovation requires a coordinated approach across government – and also required a strong link to industry; it cannot simply be research-led. And there are a growing number of efforts to increase economic dynamism and to help innovative companies to start and then to scale up.

The small economy context

Intense global competition, disruptive technologies, and increasingly skill-biased technical change, mean that advanced economies need to upgrade in order to sustain a distinctive competitive position. The relationship between skills, innovation, and economic outcomes is even sharper for small advanced economies given their deep exposure to the global economy. However, the specific characteristics of small advanced economies shape the way in which small economies should develop and integrate skills and innovation policy.

The 13 small advanced economies used as the benchmark group in this analysis have generated strong economic performance over the past several decades. There are several key reasons for this.

- Active international engagement

The levels of international engagement (exports, FDI) by small advanced economies are substantially higher than in larger economies. There was an increase in the growth of international economic activity across the small economy group from the mid-late 1990s, partly reflecting strong global growth as well as a change in the export structure of small economies towards higher growth, knowledge intensive export categories. It is this externally-driven growth that has been the foundation of strong economic performance by small advanced economies. This is because small economy productivity levels (and growth rates) are much higher in externally-oriented sectors (such as manufacturing) than in domestically-oriented sectors (such as retail or construction).

- Investing in innovation & human capital

Successful small advanced economies are characterised by heavy investments in knowledge, innovation and human capital. This focus on knowledge and human capital has been central to the way in which small advanced economies, from Switzerland to Singapore, have built distinctive international competitive positions.

- Strategic coherence

Successful small advanced economies consistently place an emphasis on skills and innovation in order to develop strength in externally-oriented sectors. However, there is no single policy template, and small countries choose to compete in a variety of ways. For example, the Nordic economic model is different approach than that in Ireland and Singapore.

Small economy performance is less about the policy specifics than the strategic coherence of policies. Although the policy specifics vary, the notion of a deliberate strategy to position their economies is a unifying theme across small countries. In many small economies, there is a clear sense of the national value proposition and how the economy is positioned to compete in the global economy.

Characteristics of small advanced economies

Skills and innovation are a central part of a coherent economic strategy for small advanced economies. But the specific characteristics of small advanced economies will shape the approach to skills and innovation policy: small advanced economies are not scaled-down versions of large economies. These characteristics mean that the approach of small advanced economies to skills and innovation policy should be different than in larger economies. Consider the following five specific small economy characteristics that shape the appropriate design of skills and innovation policy.

i. High skills requirement

The high share of externally-oriented sectors in small advanced economies generates a relatively high skills requirement. Skills and innovation matter everywhere, but the productivity bar for competitive success in externally-oriented sectors is much higher than in other sectors.

ii. Economic concentration

Small advanced economies tend to have relatively high concentrations of economic activity in a few sectors or clusters. Small economies can develop positions of world-class competitive strength in only a few parts of the economy. The implication is that deliberate choices are needed to ensure that the skills profile and innovation capabilities match the particular sectoral profile that the small economy has. For small advanced economies, skills policy is about more than building a strong base of general human capital; there is a greater need than in larger economies to develop specific human capital and innovation capability that maps onto the areas of strength in the national economic structure.

iii. Innovation absorption

Most of the world's new ideas and innovation will be produced outside small advanced economies. One of the key functions of an innovation system in a small economy is to be able to absorb new ideas and practices from around the world. Given their scale, small economies need to over-invest to be close to the frontier of this thinking in order to be able to absorb the relevant new ideas. Small economies need to have a baseline level of skills and innovation capability before they can benefit from ideas and innovation happening elsewhere; small economies can't simply 'free ride'.

iv. International factor mobility

Without high performing clusters, small economies are at risk of losing their skilled people and innovative firms. Small economies face competitive pressures from larger centres that are attractive to skilled people and high growth firms. Investing in increasing the supply of skills needs to be accompanied by demand-side policies that create opportunities. Some small advanced economies that have invested significantly in (highly mobile) human capital, without paying sufficient attention to investing in creating the opportunities for that talent to remain, have experienced significant outflows.

v. Weaker incentives to invest in skills and innovation

There is a weaker incentive for firms and people to invest in skills and innovation in a small market, as the returns may be lower. This is particularly the case outside of externally-oriented sectors, because the investment can only be leveraged over a small market. Without policy support, small economies are at risk of being in a 'low wage, low skill, low investment equilibrium' as complementary investments are not made.

Implications for small economies

Northern Ireland is exposed to these global dynamics, and can learn from the international small economy experience in responding. There are two broad implications that follow for skills and innovation policy in small advanced economies (and in Northern Ireland) from this international small economy context.

The first is the increasing centrality of skills and innovation policy in small advanced economies. The deep exposure of small advanced economies to the global economy means that most small advanced economies see skills and innovation policy as central aspects of their economic strategy. A deep pool of human capital is increasingly central to productivity and income growth, and to making a location 'sticky' for mobile labour and capital.

The centrality of this area of policy can be seen in terms of the policy and resourcing commitment directed to skills and innovation. The successful small advanced economies have a particularly strong policy emphasis on skills and innovation (Switzerland, Singapore) relative to less well-performing small economies. Skills and innovation is an intense area of policy activity and debate. Firms in small advanced economies are deeply involved too, understanding that being competitive in global markets means sustained investment in skills and innovation.

The second implication is the need for strategic coherence: a deliberate approach to integrating skills and innovation into a broader economic strategy in order to address the specific characteristics of small advanced economies. For example, the need to invest heavily in human capital, often in specific ways, and yet also need to guard against small economy exposure to the international mobility of this skilled labour; and the need to create the appropriate incentives to support the necessary investments in skills and innovation capability that is specific to industries and firms, which brings a higher risk profile. In addition, the task of aligning demand and supply of skills and innovation capability in a small economy requires a coordinating function, so that complementary investments are made appropriately.

This international small economy experience is instructive for Northern Ireland, as a small open economy. There are some important similarities between Northern Ireland and other small advanced economies in terms of their exposures and their underlying context. However, despite these similarities in context, Northern Ireland's skills and innovation performance is relatively modest compared to other small advanced economies (and to the rest of the UK).

Small economy insights on skills policy & innovation policy

Based on a series of nine small economy case studies (Denmark, Estonia, Finland, Ireland, Israel, New Zealand, Scotland, Singapore, and Switzerland) as well as general small economy analysis, a series of insights for Northern Ireland are identified. There are several themes in terms of how small economies are responding to emerging challenges and opportunities in terms of skills and innovation policy.

Skills policy

There is a broad-based commitment to upgrading the quality of the skills and education system. Small advanced economies already perform relatively well, but the more demanding competitive environment is creating pressure to do more. For example, there are reviews of vocational education in numerous countries, multiple assessments of the implications of the future of work, as well as additional investments being made in ongoing learning and active labour market policy.

- work-based and vocational education and training

Across several high-performing small advanced economy systems (such as Singapore), there is an increasing focus on vocational education – rebalancing from a dominant focus on academic credentials such as a university degree. There is an explicit notion of ‘multiple pathways’ in countries, recognising that not everyone needs a full degree to succeed in labour markets. There are efforts to raise the profile and status of vocational education, including stronger links and pathways to the tertiary sector. Systems that provide a blend of work-based learning and theoretical content allow for greater responsiveness to changing industry demand as well as providing a broad base of human capital.

- Aligning education and skills system with stakeholder demand

The link to industry is increasingly important, ensuring that the skills are relevant. Stakeholder engagement is important, both at sector and firm level as well as at regional or local level in some circumstances. These skills will often need to be specialised, given the concentrated nature of small economy strengths. There is a risk of equipping people with overly general skills, as well as the wrong sort of specialist skills. There is also increased investment in skills mapping and forecasting.

- ongoing learning

There is a greater flexibility in acquiring skills, recognising that there is a greater pace of change in labour markets. Singapore’s recently introduced ‘Skills Future’ is an example: a voucher-based system to allow people to invest in acquiring new skills throughout their career.

Innovation policy

Although there is not a single best practice model, there are some elements of good practice that seem common to innovation policy in high-performing small economies. Having a high-performing innovation system is a prerequisite for sustained strong economic performance; small economies that do not perform well on innovation tend not to generate strong overall economic performance.

- sustained investment

Over the past decade, there has been an increasing trajectory of R&D spending in the successful, innovative small advanced economies – whereas it tends to be flat in other small advanced economies. The implication is that investing in R&D (by government and by firms) is important to support economic transformation.

- business-led

Government-funded R&D is an important base for innovation capability in small advanced economies, but it needs to be supplemented by business-funded R&D. Innovation in the private sector is the ultimate driver of productivity growth. The implication is that creating an environment that is supportive of business investment in R&D (and in innovation more broadly) matters.

- organised around strategic clusters

To generate strong returns on innovation, the small economy experience suggests that the investment needs to be made in the context of deep clusters. Innovation often requires the presence of deep capabilities: complementary skills and human capital, large firms, supporting specialist firms and professional services, as well as specific capital. In addition, government investment in R&D (as well as funding of research institutions) will be complementary to private investment in these areas. To the extent that these are in related areas of economic activity, the returns are likely to be higher.

- research universities

An important way in which governments support innovation is through funding of research institutions, particularly universities. Strong research universities are important in small advanced economies for a few reasons: absorptive capacity for ideas and knowledge generated offshore, producing a pipeline of strong human capital, their research capabilities providing an anchor for clusters, attracting FDI, and so on. It is instructive that high-performing small advanced economies have a disproportionate number of top-ranked research universities.

- building an innovation ecosystem

In addition to funding R&D and innovation, small economy policy also ought to be directed at building a strong innovation ecosystem that supports the growth of innovative firms. High-performing small advanced economy governments have developed an array of initiatives to support firm growth and to better capture economic value from this process. For example, enterprise policy that is focused on supporting high-growth firms, the support of capital markets (venture capital, national investment banks), accelerators and incubators, and so on.

Strategic integration of skills and innovation policy in small advanced economies

A key distinctive characteristic of the approach of small advanced economies to skills and innovation policy is strategic integration. This is because of the need to address the specific challenges and opportunities associated with the small economy context in a coherent, comprehensive way.

Elements of strategic integration of skills and innovation policy

Three elements of effective strategic integration of skills and innovation policy can be identified from the international small economy experience.

First, a clear statement or understanding of the central role that skills and innovation plays in the overall competitive positioning of the economy – accompanied by a clear sense of the resourcing and policy implications that follow.

Second, the effective integration of skills and innovation policy needs a ‘whole of government’ policy approach to skills and innovation. Pushing on one element of skills and innovation policy without addressing the broader small economy strategic policy environment is unlikely to lead to better outcomes. High-performing small advanced economies have a deliberate, structured focus on aligning policies to generate the desired outcomes. For example, deliberate use of social insurance, labour market policy, immigration policy, and so on, to support skills and innovation policy.

Third, a common small economy approach to the strategic integration of skills and innovation policy is to organise the policy focus through strategic priority clusters that are seen to be the growth engines of the economy. In some cases, these priority clusters are explicitly identified. In other cases, the targeting is more implicit – this will often be the case in small economies where the key clusters have been developed and are self-sustaining. Because the investments are complementary, small economies need to focus their efforts in a limited number of economic areas. Without these strategic priority areas, the international small economy experience suggests that it is more difficult to sustain high levels of investment in skills and innovation – or to generate returns.

Insights for Northern Ireland

- *Is 'government-facilitated clustering' a necessary/recommended feature of effective strategic collaboration on skills and innovation policy?*

The small advanced economy experience shows that identifying target clusters is central to the strategic integration of skills and innovation policy. Clusters are important because they better allow for value to be captured, as backward and forward linkages develop (supply chains, specialist capability, and so on), allowing for external scale economies, with knowledge diffusion. Small economies that have built deep competitive positions in clusters do better than those that have not.

However, although a focus on strategic clusters is common in high-performing small economies, this is not necessarily government facilitated. In some cases (such as Switzerland), the government's role is to follow – with the private sector taking the dominant lead role. This is particularly the case in more 'mature' or established small economies, where the clusters have developed over many decades and more; this has provided time for the supporting ecosystem also to develop.

Given the current position of Northern Ireland, deliberate government action to deliberately develop and support clusters is likely to be important in terms of delivering an effective integration of skills and innovation policy.

- *Would a regional, sectoral or hybrid approach be best suited to Northern Ireland*

Several small economies have strategies with a focus on secondary cities and regions (the Nordics, Ireland). However, this regional focus tends not be at the same level of strategic priority as the sector or cluster-based approach. And the reality is that the main city in small advanced economies tends to be dominant; often around a third of the national population, and more (~40%) of GDP. The economic contribution of the large city is particularly pronounced in small advanced economies.

There will likely be specific local needs with respect to skills and innovation policy for which region-specific responses may be appropriate (e.g. local tourism, agriculture). However, the risk with regional diversification in a small economy (particularly the size of Northern Ireland) is that the clusters do not fully develop. With a small population size, the risk is that unduly regional policy generates sub-scale fragmentation and complexity (something often pointed to in the Nordics).

- *How can SME interests be effectively and fairly represented in clusters?*

One of the characteristics of small economies is that the incentives, capabilities, and balance sheets, of small and medium-sized firms may not be sufficient to support investment in skills and innovation – such as work-based training, or to invest in research and development. In addition, the international evidence is clear that SMEs are less likely to export, to invest, and to undertake innovation, than larger firms – and tend to be less productive. Most SMEs do not grow substantially much beyond their establishment size. So the risk with a policy/strategy that is heavily focused on SMEs is that it may be under-powered in terms of skills and innovation outcomes.

Indeed, the small economy experience is that large firms (MNCs) play a disproportionately important role in driving innovation, internationalisation, and productivity. That said, it is not appropriate to focus policy exclusively on large firms: SMEs also make an important contribution to clusters, even if they are not the primary engines of growth. And in many small advanced economies, there is increased policy focus on supporting high growth small firms – a relatively small proportion of the SME population.

- *Should clustering initiatives focus only on predetermined ‘priority’ sectors – for example those set out in Economy2030?*

The core economic policy focus in most successful small advanced economies is to strengthen performance in externally-oriented sectors. These are the areas in the economy in which sustained productivity growth is most likely to come, and should receive disproportionate policy and resourcing support. In Northern Ireland, the sectors selected in Economy 2030 are sensible – they are externally oriented, and are clusters in which Northern Ireland has a position on which to build.

However, this small economy priority sector focus is best seen as disproportionate rather than exclusive. Although priority sectors generate a disproportionate share of productivity, innovation, and so on, a meaningful share of national employment will be in ‘non-priority’ sectors or clusters. It is important that there is a broad base of skills and innovation capability throughout the economy, particularly given the intensity of the challenges that seem likely to emerge.

There are also trade-offs that should be recognised when determining the extent of policy focus with respect to strategic priority clusters. Although focus is required to develop the necessary critical mass in key parts of small advanced economies, this can also increase the risk exposure of small advanced economies.

- *Are there examples of how this approach has worked effectively to bolster the link between skills and innovation? If so, how has success been measured and how long after set up does it take for benefits to be realised?*

This approach of strategic integration between skills and innovation policy has worked well in many small advanced economies. In economies such as Ireland and Singapore, the explicit cluster-based policy, with a combination of strong human capital (local and foreign), together with a commitment to build innovative strength, has made these locations attractive for investment.

In small economies such as Denmark and Switzerland, with more implicit or informal strategic interaction, there is complementary investment by the public sector and private sector in skills and innovation in the context of deep clusters. For example, Denmark has specialist skills developed in sectors such as maritime, renewable energy, pharma – as well as being a locus of innovation in these sectors. Conversely, in small advanced economies where there has not been integration (such as New Zealand), there is much less evidence of deep clusters emerging and of strong outcomes.

The variation in the quality of the strategy and its implementation across small economies means that it is hard to be precise regarding the magnitude and timing of the causal impact. And a range of other factors also impact on outcomes in addition to the strategic interaction of skills and innovation policy.

Although there have been transformational episodes, where economies have explicitly developed major new policy agendas around skills and innovation (with a sectoral focus), such as Ireland and Singapore, in general these approaches are best seen as an ongoing, long-term process – rather than a specific policy event or decision, after which outcomes improve.

Economies like Finland provide useful guidance in terms of what is possible for Northern Ireland; sustained investment in human capital and innovation led to an economic transformation over the course of a decade.

- *What structural arrangements would be required to deliver effective strategic collaboration on skills and innovation policy?*

There are a wide range of institutional arrangements across small advanced economies, with no specific ‘best practice’ model that is consistently associated with good outcomes. Some governments decentralise significant decision-making responsibilities to regions, others are heavily centralised and coordinated. But despite these differences in models, there are several aspects of good practice that are instructive for Northern Ireland. Consider the following elements.

Policy coordination: For a small economy to implement a whole of government approach to a policy area, there needs to be deliberate policy coordination. It is important to have alignment behind an overarching economic strategy, with strong leadership from central agencies (or the lead economic agency). Singapore is a very good example of this. For example, the Committee for the Future Economy structure was intensively led by senior Ministers that were responsible for the key portfolios.

Role for the private sector, and other stakeholders: In some jurisdictions, formal tripartite arrangements are an important aspect of this stakeholder engagement (Nordics, Singapore, Ireland to an extent). In other cases, structured engagement with industry groups and others is important. There are also good examples of more episodic engagement on emerging demands on the skills and innovation system. Denmark's Production Council and the Disruption Council are good examples.

Focus on outcomes and accountability: There should be regular reporting against the key goals, as well as meaningful accountability on Ministers and agencies (and other stakeholders as appropriate) for progress towards the objectives. Ireland's Action Plan for Jobs is often cited as a good example of institutions structured around skills policy, anchored in a broader economic strategy.

Specific implications and recommendations for Northern Ireland

Assessment of Northern Ireland's strategic direction

Northern Ireland is moving in the right direction and has made some appropriate strategic choices with respect to policy focus. Skills policy and innovation policy are given a high priority, and are regarded as complementary policy areas, in the Innovation Strategy, the various skills strategies, and the Economy 2030 document. There is a willingness to nominate strategic priority clusters in order to more effectively align various policy instruments. These characteristics are consistent with small economy good practice.

There is no need to re-invent the wheel in terms of fundamentally revising the strategic direction for skills and innovation policy. However, drawing on the international small economy experience, there are some clear areas in which strengthening of the approach to skills and innovation policy should be considered.

First, the aspirations specified in the various economic, skills, and innovation strategy documents are a good start – but the scale and intensity of the challenges ahead needs a stronger response, of the type that is observed in high performing small advanced economies.

Second, the focus should be on execution of the strategy and getting the specific choices right. Although the strategic direction is appropriate, there is a gap in terms of translating this into specific programmes and initiatives with meaningful resource allocations. One reason for this is the absence of a functioning Executive that can take such strategic choices. However, there are also some elements on which progress should be made. In particular, to operationalise the strategy at the level of research funding, or skills initiatives, a greater level of precision in prioritisation will likely be required. This greater granularity is also important in terms of aligning a broad range of policy instruments to support growth.

And third, to be effective in driving changed behaviour, the strategic direction needs to be owned and well-understood outside the public sector. My sense is that the strategic choices are not well-understood outside the government, partly because Economy 2030 has not been formally approved. There are many separate, positive initiatives underway in the skills and innovation space, but the risk is that this is less coordinated and more fragmented than it could be if there was more intensive stakeholder engagement and communication.

Skills policy & innovation policy

A comparison of Northern Ireland's current situation relative to the characteristics of high-performing small advanced economies suggests three priority areas for skills policy action. First, as Northern Ireland continues to invest in upgrading the quality of its human capital, there will be a need to better align demand and supply. One of the characteristics of small economies like Northern Ireland is the exposure to the international exit of skilled people. To the extent possible, ongoing investments in upgrading human capital should be linked to the emerging demand for skills. This approach will mitigate the risks of a 'wasted investment' in which an over-supply of skills leads to the outflow of trained people.

The second priority is investing in ongoing learning over a lifetime – as a response to the labour market impact of disruptive technologies and business models. Northern Ireland is exposed to these dynamics, and there is a need to start developing the platforms for upgrading and transition now with increased intensity and pace. If such investments are not made pro-actively, in a way seen in other small advanced economies, Northern Ireland is likely to face significant disruption. Some large firms are investing more in further education and ongoing learning in-house. But there is a need to make these efforts broad-based and systematic across the population.

The third priority relates to the structures around vocational and professional education (including apprenticeships). The situation in Northern Ireland, as in many other Anglo countries, is to draw a sharp divide between academic and vocational tracks. This contrasts with good practice in many small economies (such as the Nordics and Switzerland), as well as emerging good practice in economies like Singapore. One of the notable areas of policy focus is to make vocational education system more flexible and integrated, so that people can move between academic and vocational pathways more easily.

On innovation policy, increased funding is needed to support economic transformation. But as important is a greater degree of alignment across multiple organisations. There is much activity underway, including initiatives related to the Belfast Region City Deal. These initiatives look to have potential, but the risk with this activity is that it increases the extent of fragmentation in the system, and reduces the degree of coordination. Many of these initiatives and investments are not obviously grounded in the government's stated priorities for innovation (as stated in Economy 2030).

Strategic integration of skills and innovation policy

A central lesson from successful small advanced economies is the importance of effective strategic integration between skills and innovation policy, in the context of a coherent overall economic strategy. Northern Ireland has made a solid start, with skills and innovation explicitly referenced in the various economic strategy documents and the choice of strategic priority areas. But institutions need to be developed in order to support effective strategic integration, and to move from strategy to execution.

Without high quality decision-making and accountability structures, it is difficult to make sustained progress – and with an ability to adapt and develop over time in response to changes in the environment. Leadership and governance is required to deliver sustained alignment and coherence across multiple policy areas without a structured set of institutions. The integration of skills policy within the Department for the Economy is a positive move in terms of supporting greater coordination.

The development of a standing economic institution, led by senior Ministers, with oversight, decision-making rights, and accountability across the economic policy domain – including skills and innovation – would be valuable. Another measure that can be taken (at officials level) is to create a 'Team NI' approach: a structured platform with the different economic policy and delivery agencies coming together on a regular basis to discuss various policy and operational issues – to support greater coordination and alignment across agencies and policy instruments in the context of an economic strategy.

Concluding remarks

Northern Ireland has made some appropriate design choices in terms of its policy/strategy documents that are consistent with good practice across the small advanced economy group. However, Northern Ireland's outcomes lag, and a significant step-up in policy commitment is needed. This imperative is reinforced by Northern Ireland's significant exposure to a range of fast-approaching global dynamics that will have disruptive effects on the skills and innovation system. As with other small advanced economies, Northern Ireland needs to move aggressively strengthen its skills and innovation policy – and in the context of a broader economic strategy that clearly describes how Northern Ireland will seek to position itself in the global economy.

There are particular priorities around upgrading vocational education and training, as well as a more structured approach to ongoing learning to make it more broadly accessible. But the key message from the small economy experience is the need for strategic integration between skills and innovation policy.

Part of this is already in progress, through the existing strategy documents. But supporting institutions are required to enable a move from strategy to effective execution. Skills and innovation policy needs to be embedded into supporting economic institutions to allow for alignment across agencies, appropriate resource allocation decisions, and to ensure accountability. Institutions are required to make strategic integration come alive: Ireland and Singapore provide good examples of this.

Lastly, as Northern Ireland takes these strategic discussions on skills and innovation policy forward, its small economy context should remain a central consideration. The way in which Northern Ireland develops and prioritises skills and innovation policy – and economic policy more broadly – should take its small economy characteristics seriously. Although much can be learned from the broader UK, and from other large economy experiences, small advanced economies provide more valuable insights.

About the author

Dr David Skilling is the founding Director of Landfall Strategy Group, which was established in 2011. David advises governments, companies, and financial institutions in several small countries, and writes regularly on global economic and political trends from a small country perspective. Previously, David was an Associate Principal with McKinsey & Company in Singapore, as well as being a Senior Fellow with the McKinsey Global Institute. Before joining McKinsey, David was the founding Chief Executive of the New Zealand Institute, a privately-funded, non-partisan think-tank. Until 2003, David was a Principal Advisor at the New Zealand Treasury. David has a Ph.D. in Public Policy, and a Master in Public Policy degree, from Harvard University, as well as a Master of Commerce degree in Economics from the University of Auckland. David was named as a Young Global Leader by the World Economic Forum in 2008.

About Landfall Strategy Group

Landfall Strategy Group is a Singapore-based research and advisory firm that provides advice on strategic issues to governments, firms, and financial institutions, particularly in small advanced economies. We provide distinctive perspectives on emerging global trends, working with decision-makers to understand key global changes and how governments, firms, and institutions should respond and position themselves in the emerging global economic and political environment.

Further Information:

Tel: 028 9041 6987

Email: roger.arneill@economy-ni.gov.uk

Web: www.economy-ni.gov.uk/articles/success-through-skills

in association with

