A Cautionary Tale of Two ‘Tigers’.

Industrial Policy ‘Lessons’ from Ireland and Hungary?\textsuperscript{i}

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Abstract

This paper draws industrial policy lessons for small Central and Eastern European states through a critical evaluation of recent Irish and Hungarian experiences. The paper outlines a ‘holistic view’ of industrial policy before exploring the experiences of the two economies. Whilst both have managed to ‘do’ policy well in some regards, substantial challenges remain in making FDI attraction the centrepiece of industrial policy, as has been highlighted recently. Overall, the paper suggests that wholesale emulation of the Irish and Hungarian approach is problematic for small open CEE states, and that more balanced approaches to development - and hence industrial policy – are warranted.

Keywords

Ireland, Hungary, Central and Eastern Europe (CEE), industrial policy, foreign direct investment, policy evaluation.

\textbf{JEL codes:} L52, O25, P51, R11, R58

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INTRODUCTION

“What works in one period is unlikely to work in the next… So when deciding which tiger to ride, it is worth remembering that the choice is only between tigers, and that if a safe ride is what you want, you would do well not to ride tigers at all” (COATES, 2007:193).

With ongoing EU expansion, much attention has focused on the impact of the so-called new member states (NMSs) on economic performance and adjustment within the EU. At the policy level, since the Lisbon ‘Growth and Jobs’ agenda emphasis has been placed on the role of foreign direct investment (FDI) attraction, as promoted through a combination of flexible labour and product markets and low corporate taxes (MABBETT and SCHELKE, 2007).

Up to the recent credit crunch, CEE economic performance had been relatively impressive, with GDP per capita for the NMSs (adjusted for purchasing power standards, or PPS) demonstrating gradual convergence to the EU average across CEE states (EUROSTAT, 2008b). This convergence, however, showed significant variation, with the Czech Republic and Slovenia having a higher GDP per capita in PPS terms than Portugal by 2007 (IBID.). This is illustrated in Table 1 below, which details the change in GDP per capita in PPS (with the EU 28 average as a benchmark of 100) between 2002 and 2007, just before the global financial crisis (GFC). In addition, by August 2008, unemployment rates in most of the CEE countries were below the EU-27 average of 6.9%, with Slovenia at 4.2% and the
Czech Republic at 4.3% appearing particularly impressive (EUROSTAT, 2008a). This would suggest, prima facie, that the dominant development approach of FDI-led growth was initially successful for CEE states in regeneration and re-orientating their economies.

However, more recent evidence paints a far more pessimistic appraisal, with all the economies concerned displaying the effects of the recent recession in terms of higher unemployment, casting doubt on the FDI-led growth model. Yet it remains notable that of the ten CEE 2004 accession states, unemployment in six was below the EU-28 average of 8.6% in July 2016 (EUROSTAT, 2016). This in turn calls for a more nuanced appraisal of FDI as part of a successful industry policy and of different performance of regions and economies.

In this context, before the onset of the GFC, Ireland had been ‘put up in lights’ as a possible model for small CEE states (ACS et al., 2007) in some regards at least. Experiencing growth rates of over 8% per year in the latter part of the 1990s, Ireland’s income per capita went from around two-thirds that in the UK in 1990 to parity (and with the then EU average) by 2000. Sustained expansion through the 2000s saw Ireland with the third-lowest unemployment rate in the EU-27 by May 2007: at approximately 4.1% (EUROSTAT, 2007b). The transformation from the ‘poorest of the rich’ to ‘Europe’s shining light’ (THE ECONOMIST, 1988; 1997) was heralded all over the world.

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iii Namely: Czech Republic (4.1%), Estonia (6.8%), Hungary (5.1%), Malta (4.9%), Poland (6.2%), Romania (6%) and Slovenia (8%).
Post 2007, however, this ‘Celtic Tiger’ narrative changed dramatically. The Irish economy went into decline in late 2008, with unemployment increasing before the impacts of the GFC were experienced (EUROSTAT, 2008a). Indeed, by early 2010, the unemployment rate in Ireland had increased to 13.2% (EUROSTAT, 2010a) by the Autumn of 2013, unemployment had reached 13.6% (EUROSTAT, 2013).

In light of the significance of this Irish economic downturn (Irish real GDP contracted by 4.8 per cent per annum between 2008 and 2011 (ESRI, 2013: 1), it is pertinent to reflect on the perceived successes and failures of industrial policy in Ireland, dominated as it has been by FDI-atraction as its centre piece. Much mainstream analysis has concerned itself with a narrow set of ‘conventional’ policies which have been seen as successful for a while at least. Typical of such commentary was the EU’s Sapir Report and associated updates (SAPIR et al., 2003; SAPIR GROUP, 2005; and SAPIR, 2006). These have emphasised the positive role for FDI and the elements that made up a favourable environment for investors such as administrative capacity, a supportive macro environment and flexible labour markets, (BAILEY et al., 2007). This paper pushes the analysis a step further in analysing Ireland, and a small CEE state that was as an exemplar of the Irish FDI-led approach (The ‘Pannonian Tiger’; FINK, 2006); Hungary - and asks: can Ireland and Hungary really provide ‘lessons’ for small CEE states?

The approach employed in the current paper is an alternative one to that provided by ACS et al. (2007) which considered whether the so-called ‘Irish miracle’ might be replicated in the small open state of Hungary. Here, however, we position Ireland and Hungary in a similar category (for reasons subsequently discussed) and ask
whether together they can provide industrial policy lessons for other small CEE economies? In so doing, the paper suggests that both Ireland and Hungary have provided examples for small CEE countries in some regards but not in others.\textsuperscript{iv}

Specifically, Ireland can offer ‘lessons’ \textit{vis-à-vis} building administrative capacity, the positioning and attempting to embed FDI, and promoting domestic entrepreneurship, although as argued in subsequent sections the latter came much too late.

Similarly, Hungary had pursued an FDI-led approach to development which for too long neglected developing domestic capacity or seeking to embed transnational corporations (TNCs) in local webs. Rather, as will be seen, the Hungarian experience was typified by TNCs producing solely to use the host nation as an export platform, and this relatively favourable position started to be questioned once EU entry in 2004 put paid to the generous subsidies and other assistance measures that had operated until then (FINK, 2006; DÖRRENBÄCHER, 2007). With the onset of the GFC, the Hungarian economy was one of the worst affected, with a US$15.7 billion International Monetary Fund (IMF) bailout in November 2008 necessitating severe austerity measures including cuts in government spending (STEIN, 2010).

The discussion that follows argues that there are severe problems in adopting the ‘Irish approach’ and that of its Hungarian counterpart, especially as they risk entrenching patterns of uneven development (HYMER, 1975). In particular, the industrial policy lessons that Ireland and Hungary can provide for other small CEE states are examined, given that industrial policy is indeed ‘back on the agenda’ of

\textsuperscript{iv} An issue for both Ireland and Hungary is that they do not constitute major markets. This is likely to influence the degree of embedding by incoming TNCs. This limits comparisons across all the CEE states.
late (BAILEY et al, 2015). Here, the argument is that there is no ‘golden bullet’ (e.g. FDI) for economic development. Rather, small CEE states need to adopt a broader industrial policy development approach and perspective than that which is normally discussed in the context of Ireland and Hungary. To this we turn next.

**DEFINING INDUSTRIAL POLICY**

Whilst now regarded as ‘back on the agenda’ at state and EU levels (BAILEY et al., 2015; BAILEY and LENIHAN, 2015), the theoretical rationale for industrial policy (IP) has traditionally been studied from a ‘market failure’ perspective. More recently, however, this mainstream ‘conventional’ take on IP has progressed to become increasingly concerned with creating appropriate ‘enabling framework conditions’ for firms and sectors to start up, develop and innovate. A prime concern has been the enabling of successful economic adjustment in countries and regions as industries transform, within the context of capital mobility. According to this view, firms are then seen as regularly interacting with a number of different organisations; other firms, universities, research centres, financial institutions, funding agencies, government agencies and so on. According to this framework, ‘systems of innovation’, clusters and networks are regarded as key frameworks. AIGINGER (2007) summarises this ‘systemic industrial policy’ approach as one that supports training, education, and entrepreneurship, encourages FDI and exports in so-called catch-up economies and dovetails with policies on innovation, clusters and ‘dynamic competitiveness’ in the higher income countries. In a similar vein to Aiginger, this paper suggests that often used concepts relating to industrial policy are too narrow and simplistic. ‘Good
practice’ industrial policy is in fact significantly more ‘holistic’ and wide-ranging in its orientation, and needs to consider a range of supply and demand-side elements in industrial development (BAILEY et al., 2009).

Looking at the Irish context, for example, the CULLITON (1992) report highlighted the requirement for an industrial policy which adopted a holistic approach comprising: a re-focusing of the education and training system; increased funding for science and technology (with greater business involvement in steering the use of such support); more focus on technology acquisition; the provision of infrastructural needs; and reform of the tax system. In addition, the need to foster clusters of related industries building on ‘leverage points’ for national advantage was also emphasised. With regards to indigenous industry, the Culliton Report suggested that a widespread existence of grants was counterproductive (BAILEY et al., 2009). The report also strongly emphasised the need to expand indigenous industries. Related to this issue, Culliton suggested that two grant-awarding agencies be set up, with one addressing the needs of incoming multinationals, and the other focused on indigenous firms’ needs.

Such a ‘holistic’ approach to industrial policy is a helpful first stage, however, we argue that any ‘good practice’ or ‘holistic’ definition of industrial policy should also incorporate micro, meso and macro perspectives requiring: well-functioning labour markets (so that available labour supply can be matched to demand); a supportive regulatory environment; and supportive macroeconomic conditions (as regards exchange rate and fiscal policy for example). Moreover, industrial policy should at the outset build in policy evaluation processes right along the evaluation spectrum.
going from *ex-ante* to *ex-post*. In particular, identifying mechanisms that work - and under which circumstances - before any intervention occurs is seen as critical.

As outlined previously, the rationale for industrial policy interventions should not solely be underpinned by a narrow and reactive market failure perspective (as a rationale for government intervention) but also need to encompass ‘systemic’ reasons for intervention (e.g. with regards to innovation policy, account needs to be taken of the fact that organisations are not innovating in isolation but in the context of a system). This approach also has to account for ‘government failure’ or ‘bureaucratic failure’ which has been down-played by some researchers when considering the advantages and disadvantages of industrial policy interventions. As KREUGER (1990) notes, when faced with market and systemic failures, it is imperative to understand how government itself operates, if the state is to accurately assess whether intervention is likely to remedy such failures (AIGINGER, 2007).

Finally, developing a genuinely holistic industrial policy requires the recognition of the phenomenon of uneven development (HYMER, 1975) noted above; notably “the tendency of the system to produce poverty as well as wealth, underdevelopment as well as development” (in COWLING and SUGDEN, 1999; 364). In this regard, over-emphasis on attracting FDI from footloose multinational firms may serve simply to reinforce uneven patterns of development such that major cities (such as Dublin or Budapest) attract high-level activities and investment, whilst peripheral regions and (typically regional/rural) and smaller cities/towns attract lower-level ‘routine’ assembly activities – hence contributing to patterns of inequality. Take Ireland’s capital city (Dublin) for example; as argued by BARRY (2008), the majority of firms in
the high-tech industries (dominated by TNCs) of computer hardware and software are clustered around the Dublin area. In a similar vein, by 2005, the numbers employed in the International Financial Services Centre (IFSC) (also located in Dublin) was 20,000 (ie. 40% of total employment of financial services in Ireland) (BIELENBERG and RYAN, 2013: 114). The implication for policy therefore is that attention needs to be paid to peripheral regions and ‘second tier’ cities, in terms of improving local/regional capabilities and in terms of transport and infrastructure support, so as to increase relative competitive advantages as part of a more ‘place based’ approach to industrial and regional policy. In this regard, one can refer to a holistic industrial policy as addressing uneven development through promoting real capability endowment in local communities, thus addressing ‘strategic failure’ (BAILEY and DE RUYTER, 2007).

INDUSTRIAL POLICY IN IRELAND (THE CASE OF THE ‘CELTIC TIGER’)

Specifically, Ireland has been cited as something of a ‘role model’ for small CEE states vis-à-vis its ability to attract and use FDI, especially from the United States. Relative to the size of its economy, by 2008 Ireland had one of the highest levels of FDI inflows in the ‘developed’ world. Beginning in the 1950s, Irish governments over many years engaged in a strategy of ‘industrialisation by invitation’ (BEGLEY et al., 2005). Ireland has been oft noted as a ‘first mover’ in the attraction of FDI (GAL, 2013). Moreover, FDI promotion policies have been pursued by successive Irish

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* The development agency IDA Ireland was formed in 1949 and was initially tasked with stimulating, supporting and developing export-led business and enterprise in Ireland. This covered both indigenous and foreign investment and start-up enterprises. In 1969 the IDA was incorporated as an autonomous state-sponsored body under the Industrial Development Act and given responsible for all aspects of industrial development. In 1994 the IDA was broken up into three separate organisations, with the IDA focusing on the promotion and development of foreign direct investment (FDI) in Ireland.
governments (TEAGUE, 2009). One of the key enticements offered over the 1950s and 1960s was a zero percent tax rate on exports (IBID). Subsequently, from the early 1970s, policy shifted towards a more selective and targeted approach. Pharmaceutical and electronics were targeted in particular, being seen as offering promising opportunities. This was despite the fact that the sorts of activities that IT industries tended to engage in at this point in time were mainly low-value assembly type operations (BEGLEY et al., 2005). Furthermore, the United States was targeted as the market for such projects given the likely benefits that would accrue to US firms by using Ireland as an export base within the EU. It is important to note that the promotion and assistance of particular sectors was well timed. For example, the extension by the Irish government of financial incentives to internationally traded services just as they were about to grow in importance was a particularly timely intervention. If strategic targeting and a more focused approach to FDI was a key part of the ‘success’ of FDI, this raises the question as to what sectors should small CEE economies now be targeting?

Over many decades, the Irish government has also enticed much FDI via a low corporation tax regime. Specifically, in the early days, there was a 10 per cent corporation tax on the profits of manufacturing companies, rising subsequently to 12.5 per cent and extended to all sectors (BUCKLEY and RUANE, 2006). This relatively low corporation tax has understandably come under much criticism by governments of other countries in recent years. In a related vein, the oft commented upon significant productivity differentials between foreign and indigenous firms in Ireland has largely been attributed to the transfer pricing practices of FDI so as to
benefit from Ireland’s low corporation tax (ARORA and GAMBARDELLA, 2005). Nevertheless, the targeting, promotion and support for particular sectors by Irish industrial policy from the 1970s onwards was in fact well timed. In addition, it is also acknowledged that the development agency (Industrial Development Authority) played a pivotal role in encouraging, welcoming and providing an after-care service for incoming firms (O’RIAIN, 2004). Indeed, we would concur with the analysis of KILLEEN (1975) when he argues that Ireland needed FDI for economic development and that a reliance on solely indigenous firms would not have been sufficient to deliver sustainable economic growth. However, our argument in this paper is that over-reliance on FDI (without a simultaneous and linked focus on indigenous firms) also stopped short in terms of being able to deliver on sustainable economic growth. Rather, we argue that a more holistic/sustainable approach to economic development and policy is required, which has a form of ‘ownership mix’ (foreign and indigenous firms) at its core and hence does not ‘put all the eggs into the one industrial policy basket’.

Rather, at this time, in Irish policy making, there was simply an assumption was that FDI infusion would result in “aggregate technological progress” due to spillover effects generated by the presence of transnational corporations (TNCs) in a host economy (FINK, 2006: 49). It could reasonably be argued that Ireland appeared to have performed well in this regard – although this is a questionable proposition to which we now turn. Indeed questions to ask here are: (i) did a strategy of pursuing FDI led growth result in a neglect of the indigenous sector (largely SMEs) in Ireland? (ii) What does the evidence suggest regarding the existence of linkages and
spillovers in Ireland (given the focus on an FDI led growth strategy?). The section concludes by considering the related issue of the development (or not) of industrial clusters in Ireland.

BAILEY et al. (2007) argued that the Irish government, on acknowledging the limitations of solely focusing on FDI as a driver of growth, also tried to develop indigenous SMEs and entrepreneurship. Whilst acknowledging this shift, we argue that a policy focus on indigenous SMEs should have been prioritised at an earlier stage of economic development. Remarkably, even though “as far back as 1979, some 95 per cent of all manufacturing units could be classified as SMEs” (ANDREOSSO-O’CALLAGHAN and LENIHAN, 2006: 282), there was no formal policy concern by the Irish government on the SME sector until 1994, culminating in the publication of the ‘Task Force on Small Business Report’ (1994).

Indeed, we would go so far as to argue that, Irish policymakers largely neglected the indigenous (largely SME) sector until the mid-1990s. This is evident in statements by numerous reviews of industrial policy over many years (TELESIS CONSULTANCY GROUP:1982), which emphasised Ireland’s over-emphasis on foreign industry as well as the CULLITON Report (1992). Yet it was not until the 1994 ‘Task Force on Small Business Report’ that SME policy was at last prioritised.

Rather, as noted, there had been the hope that indigenous SMEs would ‘grow from foreign firms through linkages and spillovers’ (ANDREOSSO-O’CALLAGHAN and LENIHAN (2006: 280). Even when SME policy moved centre-stage, how successful were policy interventions in promoting linkages and spillovers between TNCs and indigenous (largely SME) firms? Despite the prevailing narrative highlighting FDI-led
adjustment, there is significant evidence to suggest few significant relationships between the foreign (FDI) and domestic sectors (UGUR and RUANE, 2004).

It is fair to say that, however, that there was evidence in some sectors at least of improved linkages over time (on electronics for example see GÖRG and RUANE, 2001), even if foreign firms had fewer linkages (possibly due to the necessary scale needed to supply such firms (ibid.)). In high-technology sectors, the evidence of spillover effects was more obvious (GÖRG and STROBL, 2003; BARRY and VAN EGERAAT, 2008a). Here, there was evidence to support the view that the presence of TNCs did have a “life-enhancing” effect on indigenous plants, improved indigenous entry rates, and ameliorated links between manufacturers and components suppliers in sectors such as information technology.

Other studies (e.g., HEANUE and JACOBSON, 2003; FORFÁS, 2004) have examined the linkages issue. The National Linkages Programme was introduced in 1985 and shifted policy towards the building of supply networks and chains, as opposed to direct local company linkages, with mixed success. On this, FORFÁS (2004) outlined that the National Linkages Programme stopped somewhat short of reaching its potential, while HEANUE and JACOBSON (2003) argued that there was a degree of success up to the 1990s but thereafter its impact was rather insignificant. The overall conclusion on the success or otherwise of linkages and linkages policy in Ireland was summed up by RUANE (2001:12): “it is hard to either totally prove or disprove” whether linkage policies were successful.

One sector in particular has been held up as having been of central importance in the Irish FDI-led development story, notably the IT sector, where software firms have
been frequently highlighted by commentators as some of the most iconic examples of FDI spillovers (BEGLEY et al., 2005; ANDREOSSO-O’CALLAGHAN et al., 2014). On these, BUCKLEY et al. (2006) argued that various factors contributed to enhancing productivity spillovers to the indigenous software industry in Ireland, including the following: (1) SMEs choosing to locate in Ireland could be described as technologically superior TNCs; (2) the TNC software sector in Ireland was overwhelmingly export focused; (3) former employees of TNCs who subsequently proceeded to establish their own ventures were key agents of knowledge transfer to local software firms; (4) indigenous software firms had a high absorptive capacity: (5) a clustering of indigenous and TNC firms; and (6) that the indigenous software sector was enhanced by Irish government policy. The latter which concerned itself with a reorientation of the education system from the 1980s worked to provide a strong supply of graduates for technology focused industries such as the IT sector (ANDREOSSO-O’CALLAGHAN et al., 2014). The number of indigenous software firms increased from 290 firms in 1991 to approximately 770 by 2000. As a result, employment grew from 3,800 in 1991 to 14,000 jobs by 2000 (DEPARTMENT OF JOBS, ENTERPRISE AND INNOVATION, 2003).

Yet this focus and success in attracting high-quality FDI in the IT sector still resulted in a vulnerability to strategic decision making by TNCs headquartered outside of Ireland. This was clearly illustrated through the case of the Canadian software firm Corel. This was viewed as star ‘success story’ of plant upgrading in the 1990s but was shut down in 2000 when a corporate desire for closure out-weighed the benefits arising from the strong local links built up by the firm (WHITE, 2004). There tends to
be, as argued by Görg and Strobl (2003), an unwillingness by foreign-owned multinational companies to continue to operate unprofitable operations in host economies, with them relocating to more competitively priced locations.

Turning to consider the issue of wider clustering effects, it should be noted that key to maximising FDI spillovers and linkages is the development of successful industrial clusters. Here, significant efforts to build sectoral and spatial clusters in Ireland truly began in earnest only in the 1980s (Buckley and Ruane, 2006). Such efforts were then targeted at certain key ‘high technology’ sectors, notably electronics, medical devices and chemicals/pharmaceuticals. In a similar vein, particularly for IT, some of the key brand names in these sectors (such as Intel and Microsoft) were attracted to establish operations in Ireland. With the attraction of such ‘performance’ firms, and later Hewlett Packard in printing, Ireland effectively had an “electronics hub” with the “spokes” subsequently populated by dozens of smaller enterprises (ibid). Thus, while Ireland could be regarded as having been a major beneficiary of cluster formation, evidence regarding the real impact of clusters in Ireland is scarce and largely inconclusive. In so far as evidence exists, it suggests that there has been relatively minor success in sectoral clustering between TNCs and local firms, particularly in low-tech sectors and manufacturing (Buckley and Ruane, 2006).

It was later recognised, however, that as more low-value-added activities were shifted by footloose TNCs to lower-cost economies, an increased proportion of GNP would have to be generated by indigenous firms (see the Report of the Small Business Forum, 2006; Government of Ireland, 2008). Whilst welcoming this new focus, this recognition of the role of the indigenous sector should have
arisen much earlier, and can offer a significant ‘lesson’ for small CEE states. This point reiterates the need for a holistic industrial policy that welcomes FDI but also demonstrates an awareness of the limitations and fragilities of FDI-led growth, and hence promotes measures to grow domestic capacities and entrepreneurship.

Moreover, it is notable that the stock of FDI in Ireland declined over the period 2002 – 2005 as did the US share (on which Ireland was overly dependent), which peaked at some 31,000 million euros, or over 20% of FDI stocks in 2001 (CSO, 2004; 2005; 2008). Ireland has also suffered from the loss of TNCs leaving Ireland in recent years, with firms moving in search of lower labour costs for example (COLLINS and GRIMES, 2008). Writing in the IRISH TIMES newspaper in late 2009, LENIHAN and BAILEY (commenting on Dell shifting its manufacturing plant from Limerick in Ireland to Lodz, Poland) highlighted the lack of resilience in a local economic development strategy that had relied so heavily on one large TNC to act as a significant employment generator in the fourth largest Irish city. The Dell pull-out led to the loss of 2,000 jobs directly in Limerick, with wider multiplier effects (some 2,600 jobs lost in the wider economy for example in Dell suppliers). The key issue here was that Dell suppliers had failed to significantly diversify beyond Dell and so were particularly vulnerable to retrenchment. This was not atypical of a series of redundancies amongst multinational affiliates in Ireland over 2009-2011 (firms such as Boston Scientific, Amann, Georgia-Pacific, Teva, Element Six and others).

Nevertheless, by 2011 FDI in Ireland began to rise again, with almost 150 investments in 2011, a 17% rise on 2010 (IDA, 2011). Indeed, it should be stressed that the TNC sector has played an active role in Ireland’s recovery. While the sector
shed jobs, it also was the source of the vast majority of jobs created in Ireland from 2010 – 2012 (ERM, 2013). In addition, as COLLINS and GRIMES (2011) note, the types of jobs gained were of a higher value than those lost, representative of a move up the value chain for many high technology subsidiaries in Ireland.

Overall, whilst Ireland has remained a high recipient of FDI in relative terms, and FDI actually helped the Irish recovery gather pace, the recent decline in FDI stocks should send a clear warning to those who would simply point to the virtues of FDI-led growth. Rather, the Irish case (and the case of Hungary, which is examined next) demonstrates that what can be given, can be taken away, and that the economy is vulnerable to both external ‘shocks’ and decision-making at corporate headquarters elsewhere, and that an over-reliance on FDI brings with the dangers of uneven development. FDI may be needed for many reasons for economic development such as increasing capital accumulation, raising productivity and export performance through mutually reinforcing tendencies (see EBRD, 1998) and generating technological and organisational benefits for domestic suppliers and competitors.

It should be acknowledged that in the wake of the GFC, Irish government policy makers placed a significant emphasis on SMEs, entrepreneurship and indigenous firms as potentially significant contributors to job creation and economic growth more generally (DEPARTMENT OF ENTERPRISE, TRADE AND INNOVATION, 2010; 2012 and 2013). However, as we argue throughout this paper, such a policy focus (in the spirit of a more holistic industrial policy) should have come much earlier. Additionally, it is also somewhat worrying that it may have taken a crisis to spur on the Irish government to take SMEs, indigenous capacity and entrepreneurship
seriously vis-à-vis its policy agenda. Indeed, developing a competitive indigenous SME sector with links to TNCs and diversifying the nature of the economy over time should be a focal ‘lesson’ for industrial policy as the economy develops in small open economies.

**INDUSTRIAL POLICY IN HUNGARY (THE CASE OF THE ‘PANNONIAN TIGER’)**

Hungary had also been widely cited by bodies such as the OECD and the World Bank as an example of highly successful transition to a market economy for other developing economies to follow (FINK, 2006: 47) – prompting comparisons with Ireland of a so-called ‘Pannonian Tiger’ (IBID: 48). However, the process of adjustment and transition involved in FDI attraction has entailed significant problems, rendering evocations of a ‘Tiger’ highly questionable (IBID). As noted earlier, the Hungarian economy suffered reversals and has stagnated even before the GFC, with unemployment having risen from 5.8% in 2002 to 7.7% as at May 2007 (EUROSTAT, 2007a), and post GFC reaching 10.1% in August 2013 (EUROSTAT, 2013).

Under the old socialist regime (as with other CEE countries), full employment, social equality and balanced regional development were major, explicit policy objectives (FAZEKAS, 2005). However, this did not preclude Hungary from participating in the world economy; with Hungary joining the GATT in 1973 and the Bretton Woods institutions in 1982; enabling access to World Bank loans, for example (FINK, 2006). The inadvertent result of this, however, was an ultimately unsustainable level of foreign debt (with a near-default in 1990), which in turn became a key driver for the rapid opening up and privatisation of the economy that ensued (IBID.). Indeed, a key
economic constraint that the country has faced since the late 1980s (notably its large foreign debt and current account and fiscal deficits) effectively fuelled the government’s desire to attract FDI as part of the large scale privatisation process, in an attempt to raise revenue and hard currency.

Indeed a major criticism of the 1990s’ privatisation programme in Hungary was that it largely neglected domestic investors in an explicit attempt to raise as much revenue as possible from asset sales.\(^{vi}\) The wooing of foreign investors continued apace with FDI inflows peaking during the mid-1990s in association with the large utility privatisations (BAILEY, 1995). The imbalances and tensions this produced were evident, for example, in the case of the vegetable oil industry, which was sold off to a foreign buyer as a single entity, with a state owned monopoly simply becoming a private, foreign monopoly. Such a situation was not untypical, with the privatisation programme seen by many as little more than a state-sponsored programme of mergers and acquisitions (BAILEY, 1995), where the state lacked the skills, information or incentives needed to split up many enterprises and instead found it easier to sell them off complete with substantial market shares (EBRD, 1994), which meant that it could raise more revenue in the process.

As such, between 1989 and 1999, Hungary received approximately 30% of FDI inflows into the CEE region, reflecting FDI-friendly policies pursued by governments at the time, irrespective of their political persuasion (FINK, 2006: 53). In so doing, it used a range of programmes and incentives. These included Export Processing

\(^{vi}\) The comparison between Ireland and Hungary is, we feel, worthwhile, but the cases are somewhat different in that much Hungarian FDI was through acquisition. Although often heralded by policy makers, this may not add either plant or employment and may have different long term impacts as compared to greenfield investment.
Zones (EPZs), which were special tax and duty-free areas – largely granting exemption from certain taxes and excises. Accordingly, the EPZ share of exports increased from 18% in 1996 to over 43% in 1999 (IBID: 59). Other measures included accelerated amortisation, fully convertible national currency and direct financial support for plant, job creation and training (ACS et al., 2007: 133). Approximately 50% of FDI as at 2004 had come from geographically proximate neighbours; Germany (most notably with the Audi automotive company) and Austria (IBID.). In this context, the uneven development inherent with the shift to capitalist production should be noted, in that Budapest was the main beneficiary from FDI, whilst other localities depended on their proximity (or relative access) to Western European markets (VARRO, 2010), with the net result being to widen disparities between Budapest and the rest of the country (IBID.). Similarly, HUNYA (2014) notes that “FDI has reinforced and did not mitigate regional disparities in Hungary”. The dominance of TNCs in the Hungarian economy was reflected in the fact that by 2000, over 90% of Hungarian exports were by TNCs - and over 80% of imports (FINK, 2006). Similarly to Ireland, however, the vast productivity differences between the TNC and domestic sectors raised suspicions of TNCs having engaged in transfer pricing (IBID; 61), with questions over whether appropriated surplus value was going in an East-West direction (SOKOL, 2001). In a similar vein, BUCKLEY et al. (2006) argued that the significance of the contribution of TNCs to the Irish economy could have been overestimated by failing to account for the following: high level of imports; (including payments for patents, royalties and other intangible inputs); and repatriated profits.
Moreover, and quite similar to the case of Ireland noted earlier, there was little evidence to suggest that the presence of TNCs generated significant spillover effects to the domestic sector (ACS et al., 2007), with productivity in the manufacturing FDI sector exceeding that of domestic firms by over 215% in 2001 (FINK, 2006: 61) and at best a patchy record on local linkages (DÖRRENBÄCHER, 2007). FINK (2006) argued that FDI in Hungary could be seen as a result of the search for increasing returns to scale by transnational firms (rather than 'comparative advantage' per se) and as such, it should not be surprising that intra-industry trade comprised the dominant component of FDI in Hungary. This was given the fact that TNCs could afford to pay higher wages than smaller-scale, lower-technology domestic firms in turn contributed to rising insolvency rates in domestic firms and a consequent relocation of domestic production to lower-wage neighbouring CEE countries. This was exacerbated by the problems faced by some domestic firms in accessing finance. PLANK and STARITZ (2013) argue that the barriers to spillovers were indeed significant in the Hungarian case – citing evidence from the electronics sector, they point out that FDI by lead companies could be accompanied by suppliers moving in also (so-called “follow sourcing”); that fewer opportunities in domestic firms inhibited the movement of skilled workers from TNCs; and that the geographic clustering of TNCs into industrial parks limited scope for external cluster effects (IBID). vii

vii This will always happen in certain industries – such as the auto industry - as large first tier suppliers operate globally to carry out sub-assembly work for assemblers. A key challenge for developing economies is to have the capacity to supply these Tier 1 suppliers, and thus to develop and support firms further down the value chain, and in particular domestic small and medium sized firms.
Similarly to Ireland, Hungary actively used trade policy and subsidy packages in the 1990s to attract FDI, with FDI-intensive industries being those where the degree of protection against imports was highest (EBRD, 1994). This included the elimination of tariffs on inputs and increases in tariffs on final goods (such as TV assembly), and the introduction of discriminatory and product-specific import quotas such as in the paper industry (ibid). Other industries where protection was offered included the cement industry (prior to a privatisation) and the car industry. Tariffs on imports remained possible, even on those from the EU until 2002, under the vaguely worded Article 28 of the Europe Agreement. This allowed for ‘exceptional measures’ in infant industries, or sectors undergoing restructuring or facing serious difficulties. By 2002-3, however, subsidy and trade protection packages became much more tightly regulated, with eventual EU entry in 2004 leading to the generous tax and excise concessions having to be abolished (FINK, 2006). Again, this is similar to the Irish experience, where estimates suggest that over the period 1980-2003, some €5.5 billion was provided by the four Irish development agencies in the form of grant payments and equity investments (LENIHAN et al., 2005).

As a result, a number of TNCs which had initially invested in Hungary opted to switch production to lower-cost neighbours (mirroring the phenomenon reported earlier for Ireland). These firms included high profile companies such as Phillips, IBM and Kenwood (ACS et al., 2007) with other TNCs also openly discussing the relative merits of whether to shift further east. Decreases in FDI in the automotive, textiles and plastics sectors were to some extent countered by increases in FDI in media and food and tobacco (IBID.). There is some evidence to suggest that a loss of FDI
in such high-volume, price sensitive items has been compensated to a degree by a shift to higher value-added, lower-volume products that were formerly produced in EU-15 countries (PLANK and STARITZ, 2013) – for example, lower-value added items in Romania being used as inputs for production in Hungary (IBID.).

As such, there has been a shift in inward FDI, from manufacturing to services over the 20 year period between 1990-2010, with only 30% inward FDI stock in held in manufacturing by 2010 (SASS and KALOTAY, 2012). Post-GFC data from 2011 suggested that capital in transit accounted for over 83% of FDI inflows, indicating that “real” FDI inflows have struggled to recover (IBID). Similarly, The EUROPEAN COMMISSION (2015) notes concern on the ‘sluggishness’ of FDI in Hungary in recent years. It notes that while annual net FDI flows in CEE countries declined post-GFC, the decrease in Hungary was somewhat more pronounced, with annual net FDI inflows on a generally decreasing trend since Hungary’s accession to the EU (IBID). It also notes a deteriorating attractiveness on greenfield investment and underlying FDI flows even recording negative figures recently (IBID).

The lack of linkages between domestic suppliers and TNCs has compounded the situation in this regard, with FDI shifting away from Hungary in more recent years in favour of China and non-EU former Soviet bloc countries (BEKES, 2005). The Conservative (Fidesz) government of Viktor Orban, elected in 2010, has since displayed a variable stance to outside investors. Whilst it continued supporting FDI in some areas, such as the automotive and electronics sectors, it has taken a more restrictive stance in others – most notably in the service sectors of banking and telecommunications, where foreign affiliates were subject to high ‘windfall' taxes
(SASS and KALOTAY, 2012). Most contentiously, Fidesz financed tax cuts by nationalising private pension funds in 2011 (INNES, 2012). This move, whilst improving the government’s underlying financial position, damaged its standing with international investors (IBID.). By 2015, Hungary was attracting US$2.5bn in FDI capital investment in 2015, a third the level seen in 2010, with the country labelled “the forgotten FDI destination” (FDI Intelligence, 2016).

Hence, other CEE countries have improved their economic performance relative to Hungary. In this context it is notable that unemployment declined in every CEE country between EU entry in 2004 and 2008 - before the onset of the GFC - except for Hungary, where it had risen (see Figure 2, which also includes Ireland and the then EU-27 for comparison). This is not to suggest that entering the EU was solely responsible for this relative deterioration, as the unemployment rates of other CEE states were also reflective of a complex mix of internal and external pressures, including macroeconomic policy, convergence to Euro eligibility, policies to attract FDI and relative investment appeal. However, Figure 2 does highlight three distinct phases: Hungary’s comparatively better performance than other CEE states prior to EU entry in 2004; then Hungary’s eroding competitive advantage after EU entry relative to other CEE states between 2004 and 2008 (with a sharp rise in unemployment during 2004); and finally the impact of the 2008-09 GFC, as demonstrated by rising unemployment rates in all countries in the immediate aftermath of the GFC.viii

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viii Most recently Hungary slipped in the 2016-17 World Economic Forum global competitiveness ranking from 63 to 69 (WEF, 2016).
As in other CEE nations, a popular backlash against government intervention meant that the Hungarian government took a largely laissez-faire approach to industrial policy, with the exception of FDI policy, where it made active use of financial and other incentives in an attempt to attract FDI. Underpinning this was the assumption amongst policymakers and advisors that FDI had beneficial effects. Reinforcing this, the prevailing economic orthodoxy, embedded in the Maastricht criteria, meant that FDI flows were warmly welcomed for their beneficial macro-stabilising effects (such as raising hard currency and budget revenues via the privatisation programme), but with little evaluation of their real effects on industrial development. The latter were modestly beneficial in Hungary in a number of areas, having a positive impact in a number of areas. These included investment and restructuring, trade reorientation, improving management know-how, the reshaping of intra- and inter-firm relations, accelerating the development of the private sector, and in some industries in facilitating technology transfer and increasing competition (see BAILEY, 1995). However, as seen above, the overwhelming desire of the government to attract FDI also meant that it failed to adequately address some of the potential dangers arising from such an over-reliance on FDI. This is not a ‘failure’ of FDI, but rather a failure in policy to recognise potential problems and to address them.

In this vein, DÖRRENBÄCHER (2007) critically examined the Hungarian model of a foreign-led modernisation strategy, one that offered the promise of industrial upgrading but which at the same time was likely to exacerbate social, regional and economic inequalities. The overall results of this strategy were quite mixed, he
suggests. By going for the ‘big capital’ solution (‘big foreign capital’ in the Hungarian case) so vigorously, the government neglected to promote domestic industrial development.

On a more positive note, Török et al. (2013) argue that Hungarian industrial policy over time has become ‘relatively successful’ in introducing a number of tools for promoting innovation and supporting small and medium-sized enterprise as well as attracting FDI but that a “marked industrial policy profile was missing most of the time” (IBID: 19). They note that a “spectacular turn” towards active industrial policy occurred from 2000 under the Széchenyi Plan, with a much greater focus on innovation and network-building. They also note that under the latest Hungarian innovation strategy, “specific well-targeted incentive schemes” are provided to support innovative SMEs (IBID). This would suggest at least a more rapid pace of policy learning and development than in the Irish case. However, the evidence to date suggests that the net impact of these policies on fostering indigenous capacity and innovation has been negligible (SZALAVETZ, 2013), with 74% of SMEs during 2010 reporting “no innovation activity at all” (IBID. 45).

Overall, there are lessons from this for other small CEE countries which have competed vigorously with each other to attract FDI. One interpretation of Hungarian experience suggests this was a misguided approach. Despite having received around a third of all FDI in CEE countries during the 1990s, the longer-run role of FDI in the Hungarian economic development has in fact been limited. Competing with each other through offering incentives and trade protection to incoming
transnationals may not only be a negative-sum game for small CEE countries, but also overlooks the need to focus on the wider state of their economies and the development process, and in industrial policy terms on building domestic industrial capabilities (and hence adopting a more holistic approach to industrial development and policy and addressing patterns of uneven development). The latter does at least appear to have been recognised to some extent via the most recent shifts in industrial policy, it could be argued (TŐRÖK et al., 2013).

As such, returning to the issue of the evaluation of the real effects of industrial development, this is an issue where Ireland should most definitely not be held up as a ‘role model’. Current approaches to industrial policy evaluation in Ireland are improving, but as outlined by LENIHAN et al. (2005), there was a lacuna of industrial policy evaluation existing until the 1990s, despite the fact that the first form of grant to industry was as far back as 1952. According to ANDREOSSO-O’CALLAGHAN and LENIHAN (2006) - although not discussing the case of Hungary per se but the NMS in general – small CEE States can adopt a number of approaches in the context of industrial policy evaluation including: wait until pressure comes from the EC to evaluate (largely the stance adopted by Ireland until the 1990s); familiarisation with ‘best practice’ (or at least good practice) evaluative frameworks and methodologies adopted internationally so that the NMS will be well prepared when it ‘requested’ to evaluate by the EC; or to view evaluation as a beneficial tool in its own right, that is, adopt a pro-active approach to industrial policy evaluation. The latter approach is the one most favoured here, as evaluation can not only assist in ensuring accountability but can also help in improving policy over time.
CONCLUSION: LEARNING THE RIGHT POLICY ‘LESSONS’ FROM IRELAND AND HUNGARY?

Whilst acknowledging the potential merits of FDI for economic development in both Ireland and Hungary, the limitations of FDI-led growth were increasingly, if belatedly, recognised. Ireland was extremely vulnerable to the US economic downturn, given its very large reliance on US-based FDI (and the construction sector). As such, during the GFC and ‘post-crisis’ period, Ireland has suffered from competition for FDI from emerging economies with lower wage and other costs, notwithstanding the positive contribution of FDI to job creation in Ireland post GFC. Similarly, Hungary, which enjoyed an initial advantage over its neighbours, also ‘lost out’ as it had to scale back the generous platform of assistance it provided to TNCs as part of its EU membership requirements. In this context, the apparent failure to achieve any significant spillovers from the FDI sector to the indigenous sector in both countries (outside of the IT/software sector in the case of Ireland) only reiterates the need to facilitate domestic capacity and innovation.

As such, a heavy reliance on FDI to drive industrial development and upgrading ‘worked’ in a limited sense for a limited period of time in both Ireland and Hungary, but reached its limits when faced with changing TNCs’ strategies, new technologies, rising wages, adverse exchange rate movements, and the failure to achieve (in Hungary) or maintain (in Ireland) a social consensus over distributing the benefits of growth (see BAILEY et al., 2007). Most recently, Ireland has been profoundly affected by the global financial crisis. In both countries there has been something of shift towards focusing more on domestic SMEs, networks and clusters but we argue
these could have been focused on earlier as part of a more holistic industrial policy. It should always be acknowledged, that FDI is (and will continue to be) a key component of Ireland’s industrial policy strategy. There is no doubting that TNCs play a key role in terms of their contribution to the Irish economy. Looking at recent employment and turnover indicators for example, it is evident that TNCs employed 257,000 persons and generated a turnover of €168.4 billion in 2010 (CSO, 2012: 7). To place this in context (and highlight the significance of this contribution), in 2010, total employment in the economy was over 1.2 million persons, while total turnover was €352 billion over the same period (IBID: 9). Additionally, research by WALSH (2010) has estimated that US companies have over many years paid approximately one third of the annual corporation tax revenue collected in Ireland. Additionally, US companies make large payments of value added tax, excise duty and income tax. In summary, therefore, foreign firms accounted for approximately 21 per cent and 46 per cent of total employment and turnover respectively. However, it should also be borne in mind as small CEE states look to the future that a reliance on FDI on its own is no guarantee of sustainable economic growth and development as the evidence provided in this paper clearly articulates.

As LALL (2006) has noted with regard to the East Asian ‘tigers’, in the long run the route to successful industrial development is through developing and diversifying local capabilities; whilst TNCs can help in this regard, they will do so only where it is profitable for them to do so. Indeed, it is up to governments to enable the provision of the quasi-public goods needed for the development and upgrading of domestic capabilities and collective learning (which we see as essential features in addressing
issues of uneven development, as noted above). Whilst this was recognised to a degree in both Ireland (belatedly) and Hungary, a more holistic approach to industrial policy development at the outset – or at least at an earlier stage of development – might have helped in avoiding some of the problems we have identified above arising from FDI-led development and policy.

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**TABLE 1: GDP PER CAPITA IN PPS**

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<th>GDP PER CAPITA ~ INDEX EU 28 = 100</th>
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Figure 2: Unemployment rates (seasonally adjusted) 2000 – 2013

Source: EUROSTAT (2010, 2010b, 2013)