FDI-based regional development in Central and Eastern Europe: A review and an agenda

KMT-alapú regionális fejlődés Közép- és Kelet-Európában: Helyzetkép és jövőkép

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ABSTRACT: This review article reflects on thirty years of FDI-based development in Central and Eastern European regions (with a special emphasis on the Visegrad countries). The modernisation potential of FDI-led European integration is examined from a critical and comparative perspective. The authors argue that the resulting 'Dependent Market Economy' (DME) model has fallen short of its anticipated modernisation potential, while other, potentially lucrative development alternatives have been neglected. While early-stage benefits were considerable, the development model now faces signs of exhaustion and an increasing number of contradictions. The paper builds on a review of international academic literature to describe the limitations and trade-offs of the DME development model, followed by an overview of three alternate growth paths for the future.

In the macro-level perspective, it is argued that long-term catching-up rates across Central and Eastern Europe over 30 years have been limited, and signs of slowdown are increasingly apparent. Likewise, FDI does not seem to contribute significantly to domestic capital accumulation. On the micro-economic and regional levels, limited income effects are coupled with intangible risks and trade-offs. Strengthened socio-economic and territorial disparities ultimately pose problems for both metropolitan core regions and peripheries, while low capital embeddedness and limited spillovers denote weak territorial integration. It is advanced that the DME model may exacerbate future structural crises and exogenous shocks, and finally, that a development model dependent on exogenous capital structures shows curtailed capability to explore, learn, and benefit from beneficial growth opportunities.

The paper makes the case that, while the DME model cannot be realistically dismantled in the foreseeable future without considerable risk to the CEE economies, a comprehensive diversification agenda should seek to gradually reduce its risks and foster alternate sources of growth. Embedding foreign capital into local economic networks represents one possible compromise, coupled with growing supplier networks and anchoring value creation in business services as well as innovation and R&D activities. However, alternate sources of development are also to be explored. The new revival of



industrial policies in Europe and across the world opens opportunities before previously 'inconceivable' state-led development initiatives, including support for the emergence of new national champions. Last but not least, a strengthening domestic SME sector with competitive medium-sized enterprises and locally embedded production networks should serve to strengthen entrepreneurial ecosystems in domestic capital accumulation and value creation. Together, these and similar steps have the capability to shift the balance from the DME model towards a more competitive and resilient 'successor model' where the interests of FDI and domestic development can be fruitfully reconciled.

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KULCSSZAVAK: külföldi működőtőke; egyenlőtlen fejlődés; centrum-periféria viszony; kapitalizmus-változatok; függő piacgazdasági modell; konvergencia; iparpolitika; politikai gazdaságtan

ABSZTRAKT: A tanulmány a külföldi működőtőke- (KMT-) alapú regionális fejlődés harminc évét tekinti át a közép- és kelet-európai regionális fejlődésben. A KMT-alapú növekedési út összehasonlító kritikai vizsgálata során a szerzők amellett érvelnek, hogy az így kialakult "függő piacgazdasági" (DME) modell modernizációs potenciálja elmaradt a várakozásoktól, miközben más, potenciálisan hasznos növekedési források kiaknázatlanok maradtak. Jelentős korai előnyei után ma egyre inkább a KMT-alapú modell kimerülésével és nem várt mellékhatásaival szembesülünk. A tanulmány a nemzetközi tudományos szakirodalom eredményeire építve mutatja be a modell korlátjait és trade-off hatásait, majd három alternatív növekedési utat vázol fel a következő évtizedekre.

Makroszinten elmondható, hogy a közép- és kelet-európai országok hosszú távú felzárkózási rátái alacsonyabbak voltak a vártnál, és a konvergencia üteme tovább lassul. Hasonlóan, a KMT nem segíti elő megfelelő mértékben a hazai tőkefelhalmozást. Mikroszinten és térbeli metszetekben a korlátozott jövedelmi hatások mellett jelentős rizikófaktorokat azonosíthatunk be, miközben a csekély túlcsordulási hatások a KMT általában gyenge területi integrációját jelzik. Felvethető, hogy a DME modell súlyosbíthatja a makrorégióban kialakuló válságokat és külső sokkokat, miközben a kívülről irányított tőkestruktúrák csak korlátozottan képesek javítani a régiók felfedezési, tanulási, és növekedési képességét.

A tanulmány szerzői szerint a DME modell nem számolható fel komoly kockázatok nélkül az előrelátható jövőben, de szükség van egy átfogó diverzifikációs stratégiára, amely fokozatosan képes mérsékelni a kockázatokat, és megragadni az alternatív növekedési lehetőségeket. Ennek részeként lehetséges kompromisszumot jelent a KMT mélyebb beágyazása a lokális gazdasági hálózatokba és beszállítói rendszerekbe, az értékteremtési lehetőségek jobb kihasználása az üzleti szolgáltatásokban, valamint a K+F+I tevékenységekben. Ugyanakkor szükség van alternatív növekedési források kiaknázására is. Az iparpolitikák újjáéledése megnyitja az utat a korábban "elképzelhetetlen" állami fejlesztési kezdeményezések előtt is, amelyben új nemzeti bajnok vállalatok kialakulásának elősegítésére is lehetőség nyílik. Végül, de nem utolsósorban, szükséges támogatni a hazai KKV-szektort, beleértve a versenyképes középvállalkozásokat és a lokálisan beágyazott termelési rendszereket a hazai tőkeakkumuláció és értékteremtés megerősítése érdekében. Ezek a lépések együttesen fokozatosan elmozdíthatják a DME modellt egy kiegyensúlyozottabb "utódmodell" irányába, amely képes feloldani a KMT és a hazai tőke közötti érdekellentéteket.

Introduction

The economic transition of Central and Eastern Europe (CEE) was fuelled by neoliberal ideologies and political agendas of 'East-West convergence' involving marketisation, privatisation, and Foreign Direct Investment inflows (FDI; Smith 2002; Appel, Orenstein 2016; Gál, Schmidt 2017; Pluciński 2020). All of these created a moral, legal and structural environment that conditioned EU integration trajectories as well as embedding into global economic divisions of labour. The transition models were part of a clear neoliberal rhetoric envisioned as the one best way out of the collapse of communism, while CEE's actual integration path, proceeding along asymmetric power relations (re)produced new core and periphery dependencies (Smith 2002).

In this paper, mainly based on a review of academic literature, we endeavour to undertake a critical analysis of FDI-driven development policies' effects on (uneven) regional development in post-transition CEE. The spatial framework of the analysis mostly focuses on the Visegrad countries (Czechia, Hungary, Poland, and Slovakia), where FDI-based development first took root in earnest, but also encompasses other countries of the CEE macro-region (mainly Romania, Slovenia, and Croatia), as they have also gradually converged towards the FDI-based development model after shorter or longer detours. Certainly, the FDI-based development path seems to have become an expansive one!

The paper is structured in the following manner. In the subsequent, second part, we introduce the FDI-based development model, and its emergence in CEE countries. In the third part, the benefits, limitations and trade-offs of the FDIbased (DME) model are taken into account. This entails an overview of macrolevel perspectives concerning the general performance of the model with respect to growth, catching-up processes, and global/European integration; discussing spatial development patterns in the macro-regional context. The macro overview is followed by a meso- and micro-level analysis concerning its firm structures, spatial patterns, centre-periphery relationships and opportunity costs. This section focuses on the meso-regional and local perspective. In the fourth part, three development alternatives are proposed with an eye towards sustainable high-road development, and a reduction of FDI dependency through gradual diversification. The paper then concludes with a brief discussion on the viability and perspectives of a potential 'successor model'.

The rise of FDI-based development in Central and Eastern Europe

Global financial capital has played an important role in all transition economies. FDI in the banking and insurance and manufacturing sectors is closely connected to the transition process in the Central and Eastern European countries (CEECs), and has received considerable attention from both theoretical and empirical perspectives (Estrin 1994; Bevan, Estrin 2004; Csaba 1995). As a consequence, the most advanced post-socialist countries – those of Central Europe – have become highly exposed to the global economy and emerged as major manufacturing hubs within Europe. FDI from trans-national corporations (TNCs) has played a key role in shaping post-socialist countries' development trajectories. Due to the relative state of development of Visegrad countries and their proximity to Western Europe, the region has become the most attractive target for foreign investors.¹ International capital was at first seeking mainly market opportunities in CEE, which was also accelerated by the European integration process, thus increasing the attractiveness of the region (Schmidt 2014; Medve-Bálint 2014; Gál, Schmidt 2017) and contributing to a radical transformation of the region's corporate ecosystem. More recently, efficiency-seeking FDI has come to the fore.

The transformation of state-owned firms was surrounded by narratives of creative destruction. However, hopes invested in a new generation of smaller, agile, privately owned companies out-competing and replacing their declining monolithic peers through flexible specialisation and spatial networks (Harrison 1992) had proven premature in the west, and certainly a mirage in the CEECs. Much of the SME sector produced by the transition was under-capitalised, lacking in know-how and disintegrated, while faced with extreme resource constraints and market uncertainty. Instead of efficient network-based ecosystems, harsh evolutionary pressures would often select for isolated, distrustful, survival-oriented companies with weak(ened) local linkages and limited upgrading potential. The new service economy brought thorough restructuring in employment and value creation, but the transformative wave of service innovations (Gershuny, Miles 1983) was more limited in scope, and especially in *territorial impact.* The modernisation of large-scale industries became strongly tied to FDI, while the liberalisation of the commodity and financial markets led first to the deindustrialisation and high unemployment of semi-peripheral regions; then, in a second phase, to the emergence of a low-wage sector integrated into European supply chains. CEECs could not compete with the core countries in terms of both research and development and technological capabilities, but their historical circumstances made it easy for them to offer low wages as an alternative location factor for production. Asymmetric trade links in the form of unequal technological exchange, which hampered the industrial/ manufacturing development of the periphery, were already visible in CEE long before the enlargement to the East and the 2008 financial crisis (Becker et al. 2016: Gräbner et al. 2019).

The emerging West-East dependencies are best described by a 'Dependent Market Economy (DME) and Dependent Financialization model' that differs from both the Liberal Market Economies (LMEs) of the Anglo-Saxon states, and the Coordinated Market Economies (CMEs) of continental Europe (Hall, Soskice 2001;

Figure 1.: The formation of the FDI-dependent development model in CEE A KMT-függő fejlődési modell kialakulása Közép- és Kelet-Európában

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Source: authors' construction

Nölke, Vliegenthart 2009): this is a distinct, specific variety of capitalism characterised by strong FDI-dependency, foreign bank dominance and external control (Figure 1). The shifting geo-economic framework conditions have recreated the traditional historical capital, technological and trade dependencies of the CEE region (Braun et al. 2020). This became particularly noticeable after the 2008 financial crisis, which also highlighted the fragility of the transition model (Smith, Swain 2010; Gál, Schmidt 2017).

In contrast with heavy state interventionism in the successful catching-up models of the 19th and 20th centuries, the Visegrad countries had abandoned strategic industrial policy, and tied their development to seeking common interests with transnational corporations (TNCs) and international trade organisations (Rugraff 2008; Mazzucato et al. 2015; Bailey et al. 2016), often subordinating long-term interests to a 'race-to-the-bottom' behaviour. Postsocialist transformation became a top-down process conducted by the CEE governments, and assisted by transnational institutions (e.g. IMF, WB, EBRD, G7, EU), which made the institutional aspects of market integration to be part of an inherently neoliberal political project of transition (Sokol 2001; Raviv 2008). Global integration through swift trade liberalisation, the privatisation of relatively successful state enterprises (i.e. the majority of potential national champions) and the banking sector (which could finance subsequent economic development efforts) locked the macro-region on a specific development path, assisted by the EU's active role in shaping FDI-friendly economic policies

(Medve-Bálint 2014). Since CEECs lacked domestic capitalists with financial resources, privatisation opportunities were transferred to foreign investors. Furthermore, IMF-led shock therapy required privatisation in the middle of the transformation crisis, thereby lowering sale prices (Gowan 1995).² Countries where fiscal pressure to privatise was less critical (mainly Czechia and Poland) could achieve better sales results than Hungary, where the process was radical and much more rapid.

Privatisation was accompanied by a massive transfer of domestic to foreign ownership, which not only implied the external control of a large part of the CEE economies through foreign subsidiaries (in Slovakia, foreign subsidiaries accounted for 80% of the industrial production value; in Hungary, 71%), but also the development of unequal power relations between TNCs and states in domestic economic affairs (Hunya 2015). In Hungary, a particularly radical restructuring of ownership took place, extending to strategic infrastructure typically managed by public corporations in western economies (Barta 2002; György, Oláh 2019). Lower rates were found in Czechia (see Pavlínek 2002 for the more FDI-dominated automotive sector, and Sass, Vlčková 2019 for a broader overview), while Slovakia followed these processes with some delay. Poland's transformation was slower and characterised by a gradualist approach, making a virtue out of necessity, and retaining a public stake in strategic branches (György 2017). A larger surviving share of domestic ownership, a rising domestic enterprise sector, and the size of its own domestic market has since granted Poland a long-term advantage: FDI is less dominant, and the ownership structure of leading branches is somewhat more diversified.

The early-stage benefits of FDI, which Humphrey and Schmitz (2002) call 'prefab' competitive advantages (uniform across the globe, relatively easily deployed and fitted to local circumstances, and offering a tried-and-true access channel to the global interface), greatly outweighed the accessible alternatives, and would serve as a potent counter-argument to contrarian philosophies. Risks of overspecialisation and low embeddedness, and particularly the opportunity costs of neglecting alternate development paths, did not enter into the equation, and were marginalised in policymaking. State-led reindustrialisation, and deliberate attempts to support or (re-)establish national champions had long been considered a political impossibility; the failure of state-led policies under socialism had soured political elites on strategic industrial policies in general,³ while singleminded focus on the FDI-led model had also diminished academic or political interest in potential alternatives. Industrial policy, and even attempts to curtail wide-spread de-industrialisation would have to contend with a discursive disadvantage (Christopherson et al. 2014). What remained of industrial policy was largely subsumed into horizontal policy toolkits (Török 2007; Szalavetz 2008).

Limitations and trade-offs in the FDI-based development model

Macro-level perspectives

Measuring the long-term economic catching-up of the region in terms of the GDP per capita gap compared to the 12 most developed Western European countries, V4 countries had to contend with the largest historically recorded development gap during the transformation crisis in the 1990s. Due to moderate growth rates, the economic catching-up of the V4s achieved only 59% of the level of development of the 12 most developed European countries by 2020, the relative development level they had already achieved in 1939 and before the First World War (Gál, Schmidt 2017). Post-communist transformation and rapid privatisation were followed by a precipitous drop in GDP and industrial production, and entered a half-decade of transition crisis and stagnation in the 1990s, producing the largest relative development gap with the West in 100 years. Subsequent dynamic growth was only sufficient to compensate for the earlier setbacks as a recovery cycle, and the volatility of growth due to recurrent crises would yield only a relatively modest annual GDP growth rate of 2.8% during the last 30 years in the Visegrad countries, and only 2% in Hungary (Gál, Schmidt 2017). This is not the sign of a successful development model.

The figures indicate that 30 years of economic transformation have not brought about a successful catching-up to core economies, and the semi-peripheral situation of the macro-region has not been resolved; only traditional dependencies have been extended with new forms of external dependencies. As a consequence, in a global comparison, the CEE macro-region, and the V4 countries in particular, have had by far the highest FDI stock as a share of GDP until 2015 (55% on average, only some offshore centres had higher rates!). However, it can be seen that the region's attractiveness for FDI has declined over the past five years, overtaken by the EU-15 and some post-Soviet regions. FDI stock as a share of GDP has fallen in all Visegrad countries since 2017. Hungary has seen the largest drop to 56%, with the Czech Republic (71%) showing the smallest decline. Poland has stagnated at around 40% (Figure 2).

Figure 3 depicts the share of FDI stocks (as measured to GDP) for different macroregions examined (Gál 2021). With the exception of China, FDI stocks increased relative to GDP in all regions, but grew most rapidly in the V4 countries and then in the Balkans. Until 2015, the V4 countries have had the highest relative share in FDI stock globally.

Growth from mid-1990s to 2008 (at a rate rarely exceeding 5%) was driven by FDI investment by foreign TNCs. (The average annual growth rate of the Visegrad countries between 1991 and 2020 is only 2.8%, in stark contrast to the globally soaring FDI stock-to-GDP ratio until 2015.) This was followed by a significant slowdown in FDI inflow after the financial crisis of 2008.⁴ Measured in



Figure 2.: FDI stocks to GDP (1990–2021, %) A KMT állomány aránya a GDP-ben (1990-2021, %)

Source: authors' construction based on UNCTAD and Eurostat data. * Offshore-related IFDI to Hungary (in Eurostat)



Figure 3.: Average FDI stock by macroregions as % GDP (1995–2019 weighted by GDP) GDP-arányos KMT állomány a világ makrorégióiban 1995–2019, GDP-vel súlyozva

Source: UNCTAD (Inward FDI Stock)

terms of nominal GDP, all Visegrad countries started from below 15% in 1991, while the most developed Czech Republic still did not exceed 40% of the EU-15 average in 2017 (Myant 2018). In real terms, the development gap was smaller and growth was faster. Another attribute of the dependency is that, despite GDP growth and slow convergence, the nominal wage gap has been widening again since 2008 between Germany, the former main capital investor, and the Visegrad countries. As Myant argues, full convergence would imply convergence of price levels and relativities as well as earnings levels and productivity.

Empirical analysis does not find a positive and significant correlation between GDP growth and FDI, i.e. FDI inflows have not contributed significantly to economic growth in Hungary and the V4 countries in the long run (Mencinger 2007; Gál 2019, 2021). By contrast, domestic savings and other development indicators (financial, technological and infrastructure development) are the most important drivers of endogenous growth. In terms of causality, FDI does not generate faster growth either, although it is concentrated in more developed regions (Gál 2019, 2021). It can therefore be said that a higher domestic savings ratio is a precondition for domestic investment, growth, prosperity and catchingup. These are therefore more important factors than FDI, whose positive impact on growth, investment, and welfare is limited.

Thus, FDI does not contribute significantly to economic growth and domestic capital accumulation in the catching-up CEECs, because the persistent dependence on capital in a dual economy further increases (profit) income outflows as well as the GDP-GNI gap, while it does not reduce the high share of imports in manufacturing. Since the spillover effect of FDI on the domestic economy remains limited, productivity catch-up (Total Factor Productivity, TFP) is also slowing down.

All of this shows that the FDI-driven transformation model is outdated and catching up can only be achieved with a new growth model (Myant 2018). FDI has contributed to improving productivity and competitiveness in the short term, but at present both factors are stagnating at the CEE macro-regional level. In addition, the Visegrad countries also have to face the need to bridge the middle-income trap and offset the negative effects of external capital dependence. One of the largest contradictions in the FDI-driven DME model is that foreign subsidiaries, despite their dominant stake in the ownership structure of key sectors in exports and value added, contribute significantly less than expected to sustainable growth, gross fixed capital accumulation, innovation and knowledge spillovers.

Meso- and micro-level perspectives with spatial implications

The overall *income effects of FDI are rather limited,* as only a small fraction of revenues from FDI projects can be captured by host countries (Lane, Milesi-

Feretti 2006). Besides a direct one-off positive impact of FDI on the balance of payments, however, FDI increases Balance of Payment (BoP) deficits, as it leads to less re-investment and an increasing profit repatriation from the host economies (Sen 1995). Delocalisation and truncation risks are considerable (Pavlínek 2017). Another negative effect is the high import share and transfer pricing of their production, which also strengthens TNCs' income withdrawal from host countries, thereby deteriorating the current account balance.

Beyond measurable trade-offs, the DME model also comes with opportunity costs much harder to enumerate. The emergence of a 'dual structure' in transition economies is characterised by deep imbalances between the capitalisation, knowledge base, market position, and other vital characteristics of foreign and domestic corporations (Hardy 1998; Barta 2005). At the early stage, FDI is an abundant source of new technologies, modern management knowledge, increased product variety, quality assurance, and global market access: these benefits are easily grasped and quantified, particularly over the lagging or disintegrating domestic industries of late socialism. However, through no fault of its own, FDI does not 'do' many things in its host economies that domestic industry 'does' Certainly, spillovers into business services are much weaker outside the tightly knit metropolitan network where global firms organise their high valueadded service functions, from command and control to linked financial and business services (Erdősi 2003). These branches enjoy tremendous advantages on home markets, and are much weaker on the peripheries, where only local offices are located. Measuring the performance of the CEE city network (Csomós 2011, 2017; Zdanowska 2017; Raźniak et al. 2020) highlights the functional weaknesses found even in the macro-region's metropolitan cities. Intangible disadvantages spill over into R&D, innovation and design; even as distant spheres as the strength of national brands or (positive) country image. Beyond the 'made in the World' products of global value chains, what product or service is uniquely Polish? What is distinctively Slovak? These are not simply questions of identity and cultural recognition, but, as the examples of 'German engineering' or 'talian home improvement' show, economic soft power leading to quite hard trade benefits.

The *spatial consequences* spread beyond the main cities. The overall process of industrial development in the Visegrad group has so far pointed towards reindustrialisation (Kiss 2007; Barta, Czirfusz, Kukely 2008; Lengyel et al. 2017), with relatively weak counter-trends of delocalisation. The big picture conceals in-depth restructuring processes in terms of ownership, production activities, and branch structure: this shift was generally benevolent, representing a shift towards higher value-added industries and activities, and gradual upgrading processes. Yet, restructuring within the branch structure of the economy has also been accompanied by the dissolution of production networks and knowledge bases in low-tech industries (Gwosdz, Domanski 2019; Molnár 2021; Nagy et al. 2021), hindering future innovative re-industrialisation opportunities due to deskilling, and the hard-to-reconstruct loss of specialised knowledge sets. The advantages have also come at the price of increasing regional disparities. Only a few empirical studies have examined FDI's contribution to the increase of territorial disparities in semi-peripheral regions, but the effect seems significant. Casi and Resmini (2010) have shown that the potential of FDI spillovers in the Italian regions is dependent on the absorption capacity of institutions and businesses. Spillover effects, however, were weaker in manufacturing than in the services sector. Similar to Southern Italy, interactions between agglomeration and FDI in less developed regions produce adverse effects in CEE regions, where large foreign investors come to dominate regions where local firms are small and markets are thin (Menghinello et al. 2010).

This adverse effect is further strengthened, while the potential embeddedness is weakened, by the fact that FDI investors have often developed sectoral structures that do not correspond to the region's sectoral traditions (unrelated variety). While FDI investments take time to integrate into their surroundings, there is often no trace of such processes in the CEE context even beyond 5-10 years of operation – the emergence of supplier networks cannot be taken for granted. Regarding spillover effects from foreign firms, the empirical model of Elekes and Lengvel (2020) for Hungarian micro-regions has shown that neither the link to the foreign group nor the link to the domestic group is associated with a spillover effect on the host economy (measured by increased employment). This finding is reasonable given that Hungarian manufacturing exports relied heavily on low value-added assembly activities during the period of this study (Nölke, Vliegenthart 2009). This suggests that foreign firms may seek resources other than learning opportunities in a dependent market economy. This seems plausible, as the learning routines of multinational firms are often sourced from outside the host economy and managed from the headquarters of MNCs. Elekes's et al. (2019) paper on Hungary indicates that foreign-owned firms deviate more from the region's average capability match than domestic firms. However, this deviation is stronger in the reindustrialised manufacturing regions than in the capital region. Therefore, the direct effect of TNCs may lead to unrelated diversification (investing in sectors that are completely new to the host region, benefitting from low-cost standardised production), where indirect spillover effects on domestic firms are low due to the large gap between the existing and new sectors. However, Elekes and Lengyel (2020) also argue that imports serve as a channel for spillovers in this group of firms, which is a non-negligible mechanism for learning. Focusing on Czechia, Pavlínek (2004) examined the regional effects of FDI in CEECs in the 1990s and pointed out some of its potential adverse effects on regional development, such as the regional divergence process (uneven development) and the development of dual economies. He also found a limited regional spillover effects of foreign companies in terms of their supply

chain and R&D. Svetličić (2013) warned that developed regions are more attractive to foreign investors, so there is a challenge of how to reconcile the positive effects of FDI on economic growth with their negative impact on regional inequalities. Wisniewski (2005) argues that regional disparities in Poland have widened due to FDI allocation. According to Skersan-Skabic and Tijanic (2014), the impact of FDI on Croatia's regional development was positive, but at the same time it was inversely proportional to the absorption capacity of a region. Gál (2019) also confirmed the spatial differentiation effects of FDI. Based on empirical analysis, it cannot be justified that FDI investments would cause GDP growth in lagging Hungarian regions; rather, additional FDI flows mostly to the already developed counties. Government and EU resource-based investment plays a much larger role in shaping GDP than FDI. Therefore, it is not surprising that there is not a strong correlation between GDP growth and FDI, whereas domestic savings and other development indicators (technological, financial, and infrastructural) are the most important factors for endogenous growth in the regions of the Visegrad countries (Gál 2021).

The geographies of TNC-dominated production networks represent an efficient use of space from an investor perspective, but the *centre-periphery relationship fostered by uneven development* is highly wasteful on the social level. Even after a limited de-concentration process, the territorial duality between integrated and unintegrated peripheries is still substantial, and some barriers look insurmountable. The two logical responses to the resulting socio-economic tension are either to conform to the dominant path (by making peripheries attractive for FDI projects), or to explore development alternatives which would produce a better fit for these regions.

Perhaps the most important concern regarding the FDI-based DME model is *its potential to exacerbate a future structural crisis.* The vulnerability of the region is largely due to external dependence. The main contributors are the strong external capital dependence of the CEE macro-region, and the vulnerability and unequal profit sharing of the FDI-driven geoeconomic model. While modern firms and FDI-based production systems are relatively resilient and adaptable compared to state socialist predecessors, they are not immune to cyclical downturns, exogenous shocks, or the protracted decline of their respective industries. Placed within a standard industrial or technological life-cycle (c.f. Menzel, Fornahl 2009), *the DME model shows signs of a mature development phase* reliant on the exploitation and optimisation of established routines, decreased heterogeneity, lock-in effects, increasing returns, and limited growth potential. This is a natural and potentially long phase of development, and comes with decent returns, but it is a risk factor in the long run.

A high proportion of FDI in host economies represents 'putting all eggs in one basket' and inviting heightened risk exposure; and likewise, the sheer weight of FDI within the DME model can be detrimental for alternative sources of

production or employment. There is growing evidence in CEE regions that an over-abundance of FDI leads to crowding-out and congestion effects impacting domestic entrepreneurship (Lux, Páger, Kovács 2020); and this finding is consistent with lessons from Northern Italian regions (Menghinello et al. 2010; Gaddi et al. 2021). In traditional public discourse, job creation is the most frequently cited benefit of FDI; however, foreign parent companies tend to outsource only capital-intensive production and assembly activities to their affiliates, which do not often require highly skilled or a large number workers, but contribute heavily to income inequalities. The main R&D activities related to core competences are still more concentrated in the home country. Despite the economic policy stance of prioritising more knowledge-intensive FDI investors, state aid to MNCs is not actually selective among investors, due to currently volatile and dwindling FDI resources caused by a series of crises. Vulnerabilities to major exogenous shocks are considerable. If existing delocalisation risks are realised, or FDI-based economic capacities undergo massive contraction, an absence of alternatives can mean no regional capabilities exist to reuse the 'loose' production factors, thereby leading to destructive de-industrialisation instead of creative destruction and the natural churn of business cycles. Here, multiple deficiencies of the DME model might interact in a compounded fashion: low local/ domestic capital accumulation in enterprises and the financial system leads to no successor firms replacing lost capacities, which in turn expedites the outflow and loss of skilled labour, the depletion of the local and regional knowledge base, and leaves low endogenous development potential for future upswings.

The final risk, following from the previous one, involves opportunity costs; the unexplored or simply untapped development potential that lies outside the DME growth path. This realm is counterfactual and thereby hard to measure or even assess in an even-handed fashion. It might be said that the actual outcome of development processes on the regional level follows logically from inherited development potential, socio-economic and political circumstances, and reinforced through pathdependence. However, we may also advance the hypothesis that regional economies' over-saturation with FDI comes at a steep price: it diminishes seeking behaviour, or even the capability to explore and learn (c.f. Boschma 2015). In the longue durée, regional development requires transcending the notion of geographic determinism and breaking from established paths, particularly in periods of instability when previously stable institutional arrangements become loose and more malleable (Crouch, Farrel 2003). The ability to draw benefits from 'historical accidents' is a hallmark of successful regional economies, especially those rich in locally embedded, network-based social capital (Dahl, Ostergaard, Dalum 2010). This is a weak point of peripheries such as the CEE regions, and external capital/knowledge dependency is both cause and effect of their learning deficiency. Escaping vicious circles which might lead to a race to the bottom, and harnessing the potential of new development paths (growth opportunities, technologies, market openings) requires

active exploration. Thus, new path creation (Menzel, Fornahl 2009; Martin, Sunley 2010) becomes essential; and the 'glocalised' production of space, the creation of hybrid forms (Swyngedouw 1997; Drobniak 2017; Faragó 2019) serves as the way forward.

Alternatives to the DME development path

The 2008 global financial crisis has exposed the systemic vulnerability of the post-socialist neo-liberal transition model which has failed to decrease relative development gaps between 'old' and 'new' EU members, thus contributing to growing economic dependencies of CEE on foreign capital and transnational export platforms (Nölke, Vliegenhart 2009). At the same time, neoliberal narratives emphasised East-West convergence and once full catch-up, post-crisis disappointment exacerbated post-2008 slowdown and stagnation, increased vulnerability and economic imbalances in the region.

Growing evidence about the boundaries and sustainability risks of the DME model should encourage scholars and policymakers alike to consider the feasibility of sticking with the present path; as well as the potential costs and benefits of different growth opportunities. In the following section, we will discuss three alternate ways forward from the FDI-dependent (DME) development model. None of these alternatives can, nor should they be thought of as a comprehensive replacement for the current path. At the present stage of regional development, the economies of the Visegrad countries are inextricably linked to FDI. This mutual, although asymmetric dependency, is a heavily path-dependent element in regional development, and brings with it a complex set of advantages and (often opportunity) costs. Therefore, the desirable goal is to reduce exposure to FDI-related risks while deepening regional development benefits; and to move from an FDI-dependent relationship towards a position where FDI is counterbalanced by endogenous sources of regional development.

Embedding the FDI-based model: Path renewal

Path-dependence posits that continuing along an established path is more simple than embarking on another. While this comes with the risk of lock-ins and systemic rigidities (of which diminished adaptability is the most serious one), following and exploiting the dividends of an established path offers considerable advantages. Incremental improvement is a common path forward for successful regions: in contrast with the 'equilibrist' canonical path-dependence model, further refinements also take into account incremental evolution, whereby successful regions undergo dynamic adaptation and mutation, while failures are characterised by stasis, constraining environments that prevent the diffusion of new technologies and industries (Martin 2010). Accordingly, regional and industrial life cycles need not form static waves of rise and decline, but they may be closer to the Setterfield model (Martin, Sunley 2010), where 'plateaus' of temporary equilibrium are followed by consecutive upswings based on path succession, the efficient reuse of previous paths, and the exploitation of positive exogenous shocks. This regional behaviour has particular benefits for the accumulation of territorial capital.

The market-based but policy-assisted renewal potential of the FDI-based model supplies the central assumption of the first alternative development scenario: *retaining the benefits of foreign investment while systematically reducing its dependencies* to achieve gradual progress towards higher value-added, resilient forms of production. A similar strategy would rest on three basic pillars. This agenda works from an optimistic view of global integration and market relationships, assuming that stepwise improvement works over a generation.

The local embeddedness of capital is the cornerstone of this project. The seclusion of highly efficient, globally integrated but locally unconnected FDI plants is the central concern of dual economies, arising from an efficiency and knowledge gap between investors and local firms. Furthermore, the unequal spatial distribution of FDI leads to the emergence of local enclaves, which also indicates that foreign firms show weak spatial and structural embeddedness in Central and Eastern European countries, preventing significant spillover effects that are, however, business ecosystem dependent (Pavlínek, Zizalova 2014). However, the gap can narrow gradually, even if this is slow and hard work. CEE suppliers in global value chains serve as the primary examples of this convergence, a companion to export-based learning. These firms have mostly been located at the Tier 3 and Tier 2 levels, with limited expansion along the 'smile curve' model of distributing added value (Mudambi 2008) towards higher value-added activities (Pavlínek 2017, 2022a,b). Limited transfer of advanced functions can be observed in CEE subsidiaries, mainly linked to the centrally managed, efficiency- and costoriented competitive strategies of lead firms. These transfers have included production functions, corporate processes, limited testing and development tasks, although they come with a gradual 'flattening' of the smile curve, diminishing value capture (Rugraff, Sass 2016; Szalavetz 2016a,b). Likewise, as Rugraff and Sass show, supplier firms also invest actively in process and functional upgrading. The spreading implementation of Industry 4.0 solutions to integrate production processes have emerged as a dominant strain of this transformation (Molnár et al. 2020; Nagy, Molnár, Kiss 2020; Gwosdz et al. 2020).

One crucial element of improving FDI-led growth is *anchoring innovation and R&D activities.* Here, the hopes of becoming new innovation hubs have eluded the Visegrad countries. TNC strategies do not use the integrated periphery as research hubs the way they do core countries (Molnár 2021; Pavlínek 2022a). While higher R&D functions such as product design have been kept close to corporate centres, transferring production involves delegating some potential

for on-site knowledge creation, or 'shop-floor innovation' (Pavlínek, Žižalová 2014; Šipikal, Buček 2018). The existence of these activities should not instil recklessness in CEE subsidiaries, but while their direct value creation capacity is easily overstated and their results just as easily captured by corporate centres, they play a more vital role in local embeddedness. Sticky knowledge is a useful bargaining stake in preventing delocalisation, and bargaining for higher value chain segments. Hence, dependencies can be slowly and carefully shifted from unilateral to mutually dependent relationships.

The local ties of FDI are a third concern, recently the subject of two monograph-length case studies from Hungary (Józsa 2019; Fekete, Rechnitzer 2019). Both books show the embedding process as a complex exercise in networking involving stakeholders on multiple territorial scales and multiple decades, with resemblances to the triple and quadruple helix models. Success is highly dependent on the catalytic role of local institutions (flexibility, cooperation potential, resources on offer), and demand host cities with strong development systems. Both the vertical deepening and horizontal extension of local-corporate linkages are apparent. Time is essential: while there are lowhanging fruits, higher benefits are found only in the longer term, 3-10 years or longer, with multiple stages between the initial investment and deeper integration. There are favourable signs towards this possibility: over the last decade, TNCs have undertaken considerable re-investment and consolidation within the CEECs (Drahokoupil, Galgóczi 2015), and de-globalisation processes in the forthcoming decade may also lead them to deepen their positions in the Visegrad countries.

Finally, *FDI integration is bound to be easier with smaller, less monumental investment projects.* Policy interviews conducted by one of the paper's co-authors in a Hungarian peripheral region highlight the importance of facilitation. While large-scale FDI is 'ready-made', it is possible to pre-emptively embed medium-sized investors by outsourcing parts of the investment project to the local business community, and working to build supplier links from the outset. This obviously requires a prepared group of local enterprises (see the third alternate scenario), technological similarity, as well as receptive local institutions to play a bridging role. Medium-sized, flexible, locally integrated investment projects, employing a few hundred employees each, and representing diverse technological profiles and investor backgrounds, carry important benefits; and should thus be the main future 'building blocks' of foreign capital in CEE regions.

Temptations of the developmental state

For almost two decades, state-led industrial policies, and development based on national champions was nigh inconceivable in CEE and broader Europe. This peculiar blind spot lasted until the 2008/2009 financial crisis, and the subsequent

new revival of industrial policies – sometimes called the re-appearance of the 'visible hand' or 'the entrepreneurial state' in managing (re-)industrialisation processes (Cohen 2007; Török 2007; Csáki 2009; Mazzucato 2011; Mazzucato et al. 2015). A new generation of policy initiatives followed in the EU (Competing in Global Value Chains 2013; For a European Industrial Renaissance 2015; A New Industrial Strategy for Europe 2020), the United States (Helper, Wial 2011; Helper, Krueger, Wial 2012; National Network for Manufacturing Innovation Program 2016), and in individual countries. As Szalavetz (2015) has cautioned, post-crisis interventionism across Europe has *generally* stuck to 'approved' policy instruments which do no not openly break with mainstream development policies. Central concerns for this new policy generation have included advanced manufacturing, key enabling technologies, Industry 4.0 solutions, strategic autonomy, stealthy protectionism, and various regional policy suites (e.g. smart specialisation and entrepreneurial ecosystems).

If we assess the CEE industrial policy of the first two decades of transition, we can agree with Bailey et al. (2016) that the potential danger was caused by overreliance on FDI and failing to seek domestic/endogenous policy alternatives. "This is not a 'failure' of FDI, but rather a failure in policy to recognise potential problems and promote domestic industrial development" (Bailey et al. 2016, 885.). In CEE, the perceived weaknesses of the DME model and its limited catching-up potential has only recently stimulated a renewed interest in policy alternatives. Experiments with interventionism became more openly considered and debated, particularly in Hungary, where a partial course correction from the neo-liberal model had become a policy pillar of the post-2010 conservative governments.⁵ Arguments in favour of the developmental state cite the successes of Far-Eastern catching-up attempts,⁶ but more significantly, also contend that state-led policies had been just as instrumental in earlier modernisation attempts in Western European economies, particularly France's traditions of 'high-tech Colbertism' (Cohen 2007; Egyed 2014; Egyed, Póla 2020). Tellingly, two influential policy visions from mid-2010s Hungary for transcending the DME model, representing a socialist and a conservative case by high-ranking policymakers (Pogátsa 2016; György 2017), have both questioned the modernisation potential of the FDI-oriented model, and advocated different versions of state intervention in the interests of high-road development. Where Pogátsa advised convergence towards the Coordinated Market Economy (CME) model (Hall, Soskice 2001; Nölke, Vliegenthart 2009) through human capital investment and factor supply development, György placed heavier emphasis on correcting the ownership structure of the Hungarian economy (György, Oláh 2019). Gerőcs (2021) describes the new compromise as an extension of neo-mercantilist policies, aiming at rebalancing inwards and outwards flows to prevent a repeat of the debt crisis which had engulfed Hungary in 2006-2008, employing limited protectionism in favour of domestic ownership, as well as a more favourable balance between global integration and endogenous capital accumulation.

How much fact lies behind the rhetoric? What follows beyond the European policy consensus is a piecemeal approach seen most prominently in Hungary, and less so in Czechia (where a lighter adjustment was undertaken with much less fanfare). After the 2008 financial crisis, governments started to distinguish between 'good and bad' TNCs. Policymakers in some countries (Hungary) started to clamp down on excessive financialisation and put pressure on 'bad' TNCs, namely foreign banks, by imposing special taxes, such that some foreign parent banks showed a willingness to sell their subsidiaries (Sass 2017, 2020). At the same time, governments have supported stronger embeddedness and more knowledge-intensive investments by the 'good TNCs' in manufacturing with substantial subsidies. The indirect elements of the strategy have included the renationalisation of public utilities, levying taxes on rent-seeking international firms, favoured treatment for domestic competitors in public procurement, facilitating a growing domestic share in the banking sector (and a corresponding encouragement to finance local economic actors through loan schemes backed by the central bank), and fostering domestic capital accumulation in both the SME sector and large companies. Crucially, policies cultivating domestic capital have not been exclusive, and have existed side-by-side with others attracting new FDI projects, and embedding existing FDI capacities through follow-up public investments.⁷ Employer-friendly labour market policies have come with a growing employment rate and wages, but decreasing labour rights (as Gerőcs 2021 notes, these policies mimic earlier German reforms).

More limited progress is evident in what we may call 'hard industrial policy'. CEE's FDI-based path is built on a lack of effective national champions, and their dearth has been responsible for some of the 'missing pieces' in both the entrepreneurial ecosystem, and the business services sector. A limited number of domestic blue chip companies have the scope of operations to play a role as partial national champions: they include energy companies (MOL, PKN Orlen, CEZ, PGNiG), major banks (OTP Bank, Bank Pekao), pharmaceuticals (Richter Gedeon), manufacturers (Videoton), and agriculture (Bonafarm). These are publicly listed, 'semi-national' companies, with strong foreign investor stakes but at least local headquarters and management. Due to market size and more robust corporate finance, Poland dominates the field with 182 spots on the Central European Top-500 (Deloitte 2016), followed by 79 in Czechia, 67 in Hungary, 46 in Romania and 32 in Slovakia. More active state policies have encouraged these firms to play a proactive role in financing and managing entrepreneurial ecosystems. While not equivalent to TNC peers, or Far Eastern national champions in the vein of Samsung, Nokia, or Huawei, these companies can help anchor and support domestic SME networks, finance new ventures, operate on the international level, act as outwards investors in the macro-region (c.f. Sass, Éltető, Antalóczy 2014), and generate spillover effects in capital finance and the business service sector.

The possibility of supporting the advent of *new national champions* is even more curtailed. The difficulties of growing a similar enterprise from scratch, or even a successful large company, are formidable. Transformation from internationally active firms into true multinationals faces significant hurdles, and the number of failures suggests caution. Powerful and iconic national flagship companies have ended up being taken over by more powerful international investment groups, or losing the original owners' controlling stake.⁸ Fast-growing companies are particularly attractive takeover targets, as seen on the case of Solaris, Poland's autobus manufacturer.⁹ Solaris and similar acquisitions will still presumably continue to operate in their original home countries,¹⁰ the sale price is likely to be reinvested into new ventures, but some of the capital accumulation benefits and growth potential will be undoubtedly lost.

The risks of state capitalist experiments seem obvious. State socialism's industrialisation efforts were wasteful and ultimately doomed; indeed, the system's failure itself serves as a potent cautionary tale to public intervention. Moral lessons about corruption and inefficiency are commonly cited. Recent state capitalist steps have usually been dismissed as a hotbed of corruption; and certainly, corrupt domestic actors have taken the place of corrupt foreign actors in a move which Scheiring (2021, 267.) terms "the revolt of national capital", "a new class alliance between the national capital, TNCs, and nationalist politicians", and the rise of "an accumulative state". From the positive perspective, reclaiming control over economic development is an example of 'good stewardship', 'resilience and sovereignty', and 'strengthening and protecting what's domestic' (György 2021). The moral framing is different, but the essence is not altogether different.

Dismissive arguments neglect to mention that much bolder active industrial policies were routinely used in Western Europe until the 1980s: the 'inconceivable' of the present era is the everyday reality of the recent past. Ironically, the dividing line is not corruption per se; as Pogátsa (2016) persuasively argues, and a succession of historical industrialisation examples confirm (from the 19th century Austro-Hungarian Monarchy to 1950-1970s France, Italy, and Austria), periods of rapid growth and successful state intervention often come hand-invisible-hand with clientelism and widespread corruption. The moral outrage, while justified, is missing the point; the success stories and failures are distinguished by other factors. Mazzucato et al. (2015) identify five common distinguishing characteristics of successful state-led industrial policies, which deserve deeper understanding: public leadership in disseminating new technological paradigms, expanding the capabilities of actors, market discipline to weed out poor and reward high performers, a balance between capacitybuilding and curbing inertia or rent-seeking; and finally, an entry into the most dynamic current technologies, i.e. frontier industries. The role of the state is limited under the current economic and political paradigm, but its role is vital in a way that is perhaps more art than science.

Rebuilding territorial capital via the domestic SME sector

The final, third alternative considers the SME sector's ability to reduce FDI dependency and create endogenous growth opportunities. While policy rhetoric in CEE had mostly championed the SME sector for its growth potential, policy practice outside of Slovenia had dedicated far more resources to large-scale FDI imports, while often leaving SME development to pure market processes. Weaknesses in the domestic SME sector are clear to see: despite the proliferation of SMEs across the Visegrad countries in firm demographics and employment, they struggle in terms of value added. The EU's comparative SME statistics (Table 1) do not show radical differences in firm demographics or size between the EU-26 and the Visegrad group, but they display a considerable efficiency gap in terms of Value Added: large companies operating in the Visegrad countries reach 66% of the EU average, while the indicator is only 44% for SMEs (medium-sized firms are in-between). SMEs create 66-68% as much value on a per employee basis in the EU-26 and Germany as large companies; while this figure is 59% for Czechia, 52% for Hungary, 50% for Poland, and only 43% for Slovakia. Therefore, we can not simply speak of a general efficiency gap, but one rooted specifically in the SME sector; and efficient SME-based development requires a look at these weaknesses.¹¹ Ács, Szerb, Lloyd (2017) show lagging performance in the 2018 rankings of the Global Entrepreneurship Index (GEI), where Poland was ranked 30 out of

	00	5		00	5			
	Enterprises (1,000)							
	PL	CZ	SK	HU	DE	EU-27	PL	
Micro- (0–9)	1,623.0	991.1	419.9	525.9	2,036.1	2,283.1	37.8	
Small (10–49)	54.7	32.2	12.0	27.9	357.7	1,420.7	12.9	
Medium (50–249)	14.8	6.8	2.2	4.6	58.9	231.9	17.4	
Large (250–)	3.3	1.6	0.5	0.9	11.4	46.5	31.9	
SMEs	1,692.5	1,030.1	434.1	558.4	2,452.7	24,483.6	68.1	
Total	1,695.8	1,031.7	434.6	559.3	2,464.1	24,530.1	100.0	
	Employees (person/company)							
	PL	CZ	SK	HU	DE	EU-27	PL	
Micro- (0–9)	2.1	1.1	1.5	1.7	2.8	1.8	9.8	
Small (10-49)	21.5	19.6	19.2	18.7	18.9	20.1	23.8	
Medium (50–249)	107.1	100.0	106.8	97.9	99.6	104.4	27.3	
Large (250–)	880.9	746.0	864.0	947.6	934.3	1,030.8	34.1	
SMEs	3.7	2.4	2.6	3.4	7.5	3.9	16.9	
Total	3.7	3.5	3.6	4.9	11.8	5.8	32.9	

Table 1.: Companies' distribution by size categories, average size, and Value Added per employee in V4 and reference countries (2018) A vállalkozások méretkategóriák szerinti megoszlása, átlagos mérete és egy alkalmazottra jutó hozzáadott értéke egyes országokban (2018)

Source: authors' calculations and construction based on Small Business Act Fact Sheets 2018

137 countries, Czechia 38, Slovakia 36, and Hungary 50. The main strengths of the Visegrad countries lie in internationalisation, product innovation and (in Poland) startup skills, while weaknesses were especially apparent in sub-indices connected to opportunity perception, networking, cultural support, competition and (in Hungary, a highly risk-averse culture) risk acceptance. Further studies reveal internationalisation vulnerabilities rooted in weak product export potential, financing problems, and management-related weaknesses (Czakó, Könczöl 2014; Mikesy 2015).

Notwithstanding the SME sector's weaknesses, there are also strong arguments for treating it as a pillar of future regional competitiveness. With the exhaustion and transformation of FDI-based growth, endogenous development is a logical stepping stone towards 'high-road' development within the CME development model. Here, CEECs can exploit geographic, socio-economic and cultural proximities to Germany, Austria and Italy, where various forms of the CME model (particularly its emphasis on territorial SME networks – clusters, industrial districts, 'Mittelstand' firms) proliferate. This development direction is also compatible with mainstream EU development policies, and can benefit from the full available policy toolkit (https://s3platform.jrc.ec.europa.eu/).

The CME model's SME networks can be identified in various forms in CEE regions, although these are often early-stage appearances of models whose fully developed counterparts were described in academic literature and policy practice. One particular form worth considering is found in the local adaptation of *the German 'Mittelstand' model of medium-sized domestic (manufacturing) firms.* These companies, described in detail in Lehrer, Schmid (2015), Welter, Bijedić, Hoffmann (2015), De Massis et al. (2018), and Pahnke and Welter (2018), represent a virtuous combination of high competitiveness in industrial niches, the benefits of long-term strategic planning under family management, strong internationalisation, a reliance on endogenous resources and finance, re-investment into employee skills, and strong local embeddedness.

From our perspective, their particular attractiveness lies in their local and regional development role as 'social capital-based enterprises' (Lehrer, Schmid 2015) which convert scarce local resources into strong competitiveness and reinvestment into territorial capital, as well as their relatively even geographic distribution. Empirical research into medium-sized firms in Hungary (Lux, Páger, Kovács 2020) has found evidence of a tier of 'early-stage' Mittelstand-type companies across the country, as well as a similar group of 'potential' Mittelstand firms with similar structural characteristics, but smaller size (30-49 employees) – showing that they are still on an earlier point of their development trajectory. These firms show high similarity to their German peers in strategic orientation, local embeddedness, and competitive strategies, although they are mostly still in their first or early second generation, and have developed under very tough, resource-scarce circumstances.¹² They are not yet at the stage of global excellence,

but many are strong niche players or regional/national leaders; and in the last decade, many have engaged in expansion and intensive export-based learning. Most promisingly, these firms do not follow the territorial concentrations of FDI-based manufacturing, but are evenly distributed along population weights, holding a promise for peripheries where foreign investments have been missing or limited. These companies can thus be expected to contribute to the generation and accumulation of 'sticky', locally rooted territorial capital in an advantageous growth environment. Similar results have been found in a Czech peripheral region (Šťastná, Pavlík 2021), where medium-sized firms were also identified as important carriers of locally embedded knowledge sets, and actors in domestic capital accumulation.

Other SME structures are also worthy of interest. Although academic attention has focused mainly on SMEs integrated into clusters and industrial districts, clustering in CEE economies remains generally modest in comparison with the iconic 'case study' regions. Locally embedded production networks depend on both formal business cooperation and informal linkages (Coe, Kelly, Yeung 2020), but these specific factors show persistent weaknesses in CEE regions, and the conditions for endogenous growth have remained relatively modest (Vas, Lengyel, Szakálné 2015; Lengyel 2017). A significant number of manufacturing firms in Visegrad countries bear closer resemblance to unintegrated Italianate companies found outside industrial districts, and typically found in regions with an intermediate development level. These companies, as described by Paniccia (2006), focus on domestic markets with limited export activity; and instead of niche-oriented production, specialise in high-quality low-tech goods (food brands, special construction materials such as tiling and windows, or custom metal structures are typical examples). Our research (Lux, Páger, Kovács 2020) has confirmed that many SMEs, often rather successful ones, are found in this group.

These firms sometimes co-locate, but do not usually form regional clusters. However, they commonly undertake in-house product development and acquire special production skills which make them efficient market players. In similar cases, encouraging stronger networking and fostering applied innovation should protect them from the risks of falling behind in competition, offering a way out from cost-based competition and simple mass production (c.f. Hansen, Winther 2014). As Buciuni and Finotto (2016) show, distinctive and valuable knowledge is generated where manufacturing occurs; thus, the co-location of industrial production and product development is particularly beneficial to SMEs "operating in medium to high segments of consumer markets whose business model is based on a continuous renewal of their portfolio of product" (Buciuni, Finotto 2016, 12.). Overall, domestic capital lies at the heart of this development path; whether this capital is financial, social or territorial, its accumulation reduces the over-reliance on FDI, strengthens territorial networks, and represents high-road development – a combination of high competitiveness and social cohesion.

Discussion

In Central and Eastern Europe, economic restructuring has followed a development path based mainly on FDI, which has given a new boost to competitiveness, but now faces the challenge of exiting the low income trap and counteracting the negative effects of external dependence. All this puts into question the sustainability of the FDI-dependent market economy model and, even if belatedly, the importance of seeking economic policy alternatives. In the long run, FDI-led growth has made only a limited contribution to economic growth and has failed to trigger the internal capital accumulation that is the basis for sustainable modernisation. Moreover, this FDI-dependent transformation model alone is not sufficient to ensure the long-term prosperity of regions, which reinforces the negative perception of economic transformation and strengthens anti-EU populism (Schmidt 2018). While EUwide discontent and the anti-EU vote in the EU-15 is mainly a consequence of local economic and industrial decline in combination with higher unemployment and a less educated workforce in the prosperous manufacturing regions (Dijkstra et al. 2019), in the CEECs, the long-term negative effects of external (capital) dependence and the related external vulnerabilities are the main root causes.

Even at its most beneficial, unreasonably strong external control poses limitations for strategic autonomy, atrophies innate decision-making capacity, and may lead to a 'bad fit' in case of large-scale dislocation (significant negative exogenous shocks) or a major conflict of interests. Too much hinges on the decisions of global actors; and there is too little domestic knowledge and power to develop an autonomous alternative. Rethinking powerful unilateral dependencies is thus quite timely, especially considering the FDI-based path has now been generational: its features are clear to see, and its limitations/ exhaustion are increasingly apparent. Moreover, exhaustion has set in; new advantages are increasingly hard to come by, while early signs of problems associated with a mature stage in technological life-cycles are visible: a decrease of novelty and variety, reduced seeking behaviour, and growing reliance on exploiting the increasing returns of a stable mode of production (Grela et al. 2017; Galgóczi, Drahokoupil 2017; Kalotay 2017; Szent-Iványi 2017; Myant 2018; Stefański 2021).

With respect to policy implications, investment policies in the CEECs should not only address the conflict between the own interests of MNCs and the host economies' social returns, but also has to counteract the negative effects of FDI with a proactive governmental industrial policy that supports domestic firms (Bailey et al. 2016; Iammarino 2018; Sass 2020). Potential dangers arising from over-reliance on FDI, which are in fact not a 'failure' of FDI *per se*, but rather a *failure in policy to recognise potential problems and promote domestic industrial* *development.* Therefore, rebuilding domestic industrial capabilities, or at least achieving a deeper embeddedness of knowledge intensive (digital) FDI is necessary, especially in knowledge-intensive sectors, rather than spending resources on attracting FDI (c.f. Józsa 2019). There is a need for adapting a more comprehensive approach to industrial development and at the same time addressing patterns of uneven development.

The three alternatives considered above are not discrete options: although they come with mutual trade-offs due to resource constraints, they should be best understood as broadly compatible, overlapping policy weights in a complex decade-long diversification agenda. There are trade-offs and resource constraints, but the same is true for the DME model. However, incremental progress along the development paths identified in this paper should produce a sustainable, resilient successor model that can contend with the needs and challenges in the coming period of post-Covid, post-conflict instability, and global disintegration (deglobalisation). There is no reason for responses to be uniform across countries, or even regions; in fact, a differentiated approach taking into account historical legacies, current capabilities, and possible futures should deliver superior results. The previously described development alternatives, and the uncertain environment we may expect after the Covid-19 pandemic and the Ukraine conflict point towards stronger state interventionism, and an active, 'visible hand' approach towards economic development (although they do not automatically involve effective regional policy, often treated as a 'by-product' or 'downstream area' for state-wide policies). The eternal question remains: how far is state intervention benign, and from which point on is it too much of a good thing?

Notes

- 1 In the 1990s, Hungary had an early mover advantage in FDI attraction due to its openness, relatively good fundamentals, as well as the need to stabilise a heavily indebted economy; later to be overtaken by Czechia and Poland, and at the turn of the decade, followed by Slovakia (Kiss 2007). Romania maintained a mixed model of 'cocktail capitalism' without a coherent framework (Ban 2013), but ended up adapting the DME framework from the 2000s, with some success. In Slovenia, stable endogenous growth, a nationally owned banking system, relatively strong innovation, and good export performance by domestic manufacturing companies led to a high-road model of European integration (Rojec, Jaklic 2002; Gál 2010), ultimately replaced by the FDI-based path after the 2008 financial crisis (Mörec, Rašković 2011).
- 2 Purchase prices were minimal in CEE: the average amount of foreign equity invested in developed countries were 18 million USD per project, and in developing country subsidiaries averaged 4 million USD, while in CEE it had only been 380 thousand USD (Gowan 1995).
- 3 Partial exceptions existed in socially sensitive branches, such as Poland's steel industry, where state intervention would persist into the 2000s; and coal mining, into the 2010s.
- 4 A notable exception was Poland where growth continued to be quite rapid: this was the country that was the least dependent on inward FDI and on exports of manufactured goods.

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- 5 More limited correction efforts are also evident in Poland and Czechia, although the latter's FDI exposure is lower than expected due to round-tripping and the presence of multiple holding centres in the country.
- 6 This policy transfer has been especially visible in the Hungarian–South Korean relationship, where trade diplomacy was accompanied by intensive knowledge exchange.
- 7 E.g. in the automotive industry, by constructing a major test range for autonomous vehicles, or launching the 2015 Ányos Jedlik Plan to foster a new ecosystem for electromobility. The Modern Cities Programme, a planning instrument aimed at Hungary's cities, has also invested heavily into industrial background infrastructure (Fekete 2021).
- 8 In Hungary alone, recent examples on the list include Szentkirályi (beverages), Fornetti (baked goods), and Waberer's (freight).
- 9 Originally a 36-employee family firm from Poznań, it had built considerable capacities in hybrid and electric vehicles, and emerged as Europe's second bus exporter after Germany with 2300 employees, a remarkable feat in a peripheral economy (Gwosdz, Guzik, Domański 2011; Domański et al. 2016). However, Solaris was acquired in 2018 by a Portuguese firm, with a 35% minority stake purchased by the Polish Development Fund.
- 10 Although as Hungary's 1990s and 2000s experiences with the acquisition and complete dismantling of its plant oil and sugar industries by predatory foreign investors demonstrate, there are no long-term assurances.
- 11 Two further facts are worth noting: Hungary's lower SME density compared to similarly-sized Czechia and half-sized Slovakia; and structural differences between the Visegrad group and Germany (as a main investor and reference country).
- 12 Also see Petrů, Havlíček (2017) for a study of growth and generational change for Czech, Lušňáková et al. (2019) for Slovak, and Marjański, Sułkowski (2019) for Polish family firms.

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