De-industrialisation, Comparative Economic Performance and FDI Inflows in Emerging Economies

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Abstract

We address calls to incorporate comparative political economy considerations into IB scholarship. In particular, we conceptualize and test empirically the hitherto unexplored relationship between de-industrialisation and relative performance of groups of countries, and FDI inflows in emerging economies. Using a panel dataset over the period 1996-2004 and employing conceptual and methodological innovations (not least the use of comparative independent variables), we find support for the ideas that relative de-industrialisation of developed economies will increase FDI inflows into emerging economies, while the relative under-performance of developed counties will reduce it. We also find that divergence in business cycles – de-coupling between the two groups of countries fosters FDI inflows in emerging economies. These help explain and predict recent changes in the global business landscape and inform public policy and managerial practice.

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Highlights

- de-industrialisation/relative economic performance and FDI.
- use of variables that account for ‘opportunity cost’ of FDI.
- de-industrialisation of developed economies increases FDI into emerging.
- relative under-performance of developed economies reduces FDI into emerging.
- de-coupling fosters FDI into emerging economies.

Keywords: de-industrialisation, comparative economic performance, FDI inflows, emerging economies, business cycles-de-coupling.

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1. Introduction

In recent years, the global landscape of foreign direct investment (FDI) has shifted to the developing and emerging world. In 2010, FDI inflows into developing and emerging economies exceeded that to the developed economies for the first time. At the same time, FDI is widely seen by many scholars and policy makers alike as an important contributor to the development process of the developing and emerging economies (UNCTAD, 2011). The ability of some such countries, notably the BRICs (Brazil, Russia, India and China) to grow at much higher rates than ‘developed countries’, in part through appropriate and innovative uses of trade, FDI, investment and domestic (such as industrial) policies (Rodrik, 2004; Stiglitz, 2008; Lin, 2011), point to a novel dimension to the issue of the antecedents of FDI. An important question is to what extent and how FDI in emerging economies is affected by the relative economic performance of developed and emerging countries. In particular, de-industrialisation and the need for re-industrialisation are becoming major concerns in developed countries, with renewed calls for the adoption of industrial policies, to improve overall competitiveness in the global environment (EC, 2010).

Despite some conceptual work (OECD, 2009; EC, 2010; Warwick, 2013), however, the impact of de-industrialisation and comparative economic under-performance on FDI inflows in emerging economies remains unexplored. Given the current prominence of the BRICs, and their FDI-attracting record, this is no longer satisfactory. Our aim in this paper is to shed some light on this important and under-researched issue.

We aim to fill the following research gaps in IB scholarship. 1. The limited incorporation of comparative political economy concerns (Jackson and Deeg, 2008), more specifically theories of economic crisis, economic performance and de-
industrialisation. 2. The lack of focus on the impact of comparative/differential (not absolute) performance on FDI inflows-this is simply not measured-tested in extant literature. 3. The importance of de-coupling between developed and emerging economies on FDI.

There is a very extensive literature on the determinants of inward investment: starting with early surveys by Agarwal (1980) and Schneider and Frey (1985), to more recent reviews by Biswas (2002), Bloningen (2005), Dunning and Lundan (2008) Faeth (2009), and Sawalha, Mazouz and Pellet (2013). From the articles summarised in these surveys (in excess of one hundred) none explores the impact of comparative/differential performance of host/home economy, and the role of business cycle divergence-de-coupling on inward investment. These are important because they test hitherto unexplored relationships and, in the case of the focus on comparative/differential effects, because they provide fresh evidence on an extensively explored and important topic, in novel way, which also captures the ‘opportunity cost’ of investment decisions. This is because any investment to invest cross-border involves the opportunity cost of not investing these resources domestically.

By way of an example, when Mexican cement company CEMEX decided to invest in the cement industry cross-border, it faced the opportunity cost of not investing these same resources into a different activity within Mexico. By focusing on the absolute, not relative, effects, extant literature ignores the opportunity cost of using resources in cross-border activities, vis-à-vis employing them in order to diversify into activities within the country, in this case Mexico. This is an important omission in general, and in particular, given the return of the debate on the relative advantages of national conglomerates, relative to cross-border MNEs, that has
recently grabbed the attention of the media (see, for example, *The Economist*, 11\textsuperscript{th} of January 2014). Our focus on the comparative determinants of home/host country, accounts for this very important aspect.

Hence, in addition to addressing the aforementioned gap, and/or because of this, our intended contributions involve the following. 1. The first study on the role of de-industrialisation and comparative economic performance on FDI inflows in IB scholarship. 2. The first study to acknowledge and empirically account for comparative/differential performance, not just absolute, on FDI inflows. 3. The first attempt to conceptualise and test for the role of business cycle divergence-de-coupling on FDI inflows.

In all, the aforementioned help offer a better appreciation of globalisation and the currently highly debated apparent disconnect between firm-level and national level performance. Moreover, they provide a hint as to the future of FDI into developing countries and partly predict the emerging slowdown of the BRICs. We consider these, and other innovations discussed in the text, to be reasonably important contributions to IB scholarship and answer the call for more comparative political economy input into IB (Brouthers, 2013).

In terms of the structure, Section 2 critically assesses extant theories of de-industrialisation and relative economic performance, examined in the context of more secular views on economic crises, and conceptualizes their relationship to internationalisation of production, paying specific attention to FDI.\textsuperscript{3} Section 3 presents our data and operational measures. Section 4 discusses the evidence from our empirical investigation. Our last Section summarises, provides a discussion, and concludes with policy implications, limitations and scope for further research.

\textsuperscript{3} Despite the rise of non-equity forms of cross-border operations by multinational enterprises (MNEs), see UNCTAD (2011), FDI remains important, not least in that it afford MNEs more power in shaping the rules of the game in host countries (Pitelis and Teece, 2010).
2. De-industrialisation, relative economic performance and FDI

The question of de-industrialisation and the associated comparative-declining, at least in relative terms, economic performance (‘relative decline’) of some developed countries, had been discussed by political economists for a considerable time (see Singh, 1977; Rowthorn & Wells, 1987; Coates & Hillard, 1986), but has found no application to IB scholarship, in particular the analysis of FDI. This is a research gap we aim to fill in this paper.

Usually de-industrialisation and ‘relative decline’ are linked to the industrialization and the relative ascendance of emerging economies, recently the so-called BRICs (Brazil, Russia, India, China) and the ‘Next ones’, such as the CIVETS (Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa)- an acronym coined by the Economist Intelligence Unit (EIU), and Goldman Sachs’ ‘Next Eleven’ (Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, Philippines, South Korea, Turkey, and Vietnam); see Wilson & Stupnytska (2007), O’Neill & Stupnytska (2010). In comparative political economy, de-industrialisation and ‘relative decline’ are in turn sometimes linked to secular theories of economic crises (Stafford, 1989). In this context we first provide a short background of theories of economic crisis and their hypothesized impact on internationalisation of production, and then focus on the impact of relative de-industrialisation tendencies between different groups of countries, and FDI inflows in emerging economies.

2.1 Background: the political economy of system-wide economic crises
The standing of the theory of economic crisis in mainstream ‘neoclassical’ and in international business economics is peculiar. In mainstream neoclassical economic theory, economic crises theoretically cannot exist. If markets are perfectly competitive and the government does not fail and/or create problems with undue and misguided interventions, markets should allocate resources in a Pareto-efficient way. This is the ‘first fundamental theorem of welfare economics’, see Dasgupta, (1986) for a critical account. In this context, crises can only emerge if there are ‘policy errors’. Monetary economists, for example, such as Milton Friedman, have explained the Great Crash of 1929 in terms of such policy errors, notably the unduly restrictive monetary policy by the Federal Reserve (Friedman & Schwartz, 1963). Another possibility for economic crises arises from ‘market failures’. Such failures can be the result of ‘externalities’ and/or imperfect market structures, such as oligopolies-monopolies (Stiglitz, 2000; Kindleberger, 1988). Transaction costs theorists, such as Ronald Coase (1960) and Kenneth Arrow (1963), generalized such failures in terms of high market transaction costs (Williamson, 1985). In their analysis, the optimal mix between the private and public organisation, is where the sum of transaction and organizational costs are minimal. Transaction cost reductions within and between countries can be a potent determinant of economic development (North, 1990; North et al., 2006; Wallis & North, 2010). Political hazards in particular can impact on internationalisation and FDI (Henisz & Williamson, 1999; Henisz & Zelner, 2004).

At the macroeconomic level, market failures can be the result of insufficient ‘effective demand’ (Keynes, 1936). In the Keynesian tradition it is expected that such failures can be solved through appropriate government intervention, such as a fiscal

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4 ‘Crisis’ (from the Greek word ‘κρίσις’ meaning ‘judgement’) refers to an abrupt disruption (‘judgement time’) of economic activity. It differs from cyclical fluctuations in economic activity, the ‘business cycle’ (Kenway, 1987; Mullineux, 1990).
stimulus. Therefore, here too the manifestation of crises can be viewed as the result of ‘policy errors’ (Bleaney, 1976). The fiscal stimulus packages adopted by many countries at the beginning of the recent recession were regarded by some as a vindication of Keynesian theory and prescriptions (Skidelsky, 2010). The subsequent ‘austerity drive’, instead, is motivated by the perception that sound finances, are sine qua non for resumed growth. Here too the current savage crisis is attributed to policy errors, in terms of the lack of fiscal discipline, the political business cycle, and/or corruption—in a word ‘government failures’ (Dow, 2008). The arguments by Bacon and Eltis (1976) that an increasing role of the state would tend to engender secular underperformance, due to the lower productivity of state sector services, as well as Feldstein’s (1974) argument that pay-as-you-go social security systems would tend to depress capital accumulation, by discouraging saving, are the nearest one can get to a mainstream theory of secular crisis. However, as both problems can be addressed, for example by reducing the role of the state, they cannot be seen (and they are not seen by their proponents) as theories of crises per se, but rather as symptoms of an overgrown public sector; a topic of continued relevance today.⁵

The above arguments about market and government failure raise the possibility of simultaneous failures in all major economic institutions of capitalism. Economic crises could therefore be seen in this light as situations where all extant institutions fail, and/or where the failures by one (or more) are not resolved by the others, and are perhaps even exacerbated through simultaneous failures (Pitelis, 1987). It is arguably a major remaining deficiency of neoclassical economics that it does not address such possibilities – hence downplaying the possibility of economic

⁵ See the Economist’s January 23-29, 2010 (a) leader ‘Big Government Stop!’
crises. This has come with a major cost-not least in terms of the embarrassing failure of leading neoclassical economists to predict the current crisis (Lawson, 2013).

Macroeconomic theory also tends to downplay the importance and role (sometimes even the presence) of the business cycle. For example, ‘real business cycle’ theory attributes the cycle to rational reaction by economic agents to external shocks and policy actions, under conditions of uncertainty, hence denying the possibility of the cycle being a systemic endogenous phenomenon (Lucas, 1988; Mankiw, 1989; Mullineux, 1990; Crucini 2008). Moreover, the ‘new consensus macroeconomics’ (Blanchard, 2008) portrays an economy, which moves towards its long-term equilibrium (Woodford, 2003), thereby denying the possibility of an endogenous tendency towards economic crisis.

Non-neoclassical political economists were, and remain, less sanguine about the prospect of crisis and cycle-free capitalist economies. For example, the business cycle has been explored by Kalecki (1968), in terms of the impact of fluctuations in investment on profits and national income, and in terms of the determination of investment decisions (what Kalecki called ‘the central pièce de résistance of economics’, Kalecki, 1968, p. 263). The currently popular work of Hyman Minsky (1986) attributed the possibility of financial crises to a tendency in capitalist economics to engender fragility by inducing the undertaking of increasingly riskier financial transactions. Kindleberger’s (1978) influential work, built on earlier work by Minsky, to develop a theory of financial crises, where external shocks as well as endogenously engendered financial fragility help engender financial crises (Mullineux, 1990). More recent explanations of the current financial crisis attribute the crisis to the separation between lending and the undertaking of the risk of lending

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6 For an extensive critical analysis of theories of business cycles and financial crises pre-1990, see Mullineux (1990). For a more recent account see Crucini (2008).
that has come about through complex structured derivative financial products (Pitelis, 2010).

On the other side of the spectrum, the reaction by some Western governments to the crisis has been attributed to a ‘financial hypocrisy’ (Stiglitz, 2007). This is because Western governments did not follow the advice they previously gave to crisis-ridden East Asian Economies, during the East Asian crisis, to adopt restrictive policies, so as to mitigate the problem of ‘moral hazard’ (basically that if one is rescued, there will be no incentive to improve in future).

Coming back to the ‘real’ economy, much of this has all but been forgotten in recent debates about the current crisis. The main concern seems to be whether, when and how much does the financial crisis impact on the real economy, not whether there are specific real economy-related reasons for the emergence of economic crises and the business cycle to start with (Dow, 2008). Yet, classical and post-Keynesian political economy scholars have developed theories of economic crisis, de-industrialisation and endogenous business cycle over many years. For example, classical scholars have discussed two main types of crises. First, those related to under-consumption and reduced effective demand. This relates to the Keynesian ideas about the importance of effective demand, and is attributed to inequalities in distribution of income under capitalism, between profit and wage earners (Baran & Sweezy, 1966). These inequalities tend to depress consumption by reducing the disposable income of households, and subsequently investment (which is seen as a derived function, depending on consumption), see Bleaney (1976).

More recently, Argitis and Pitelis (2006) have anticipated the current financial crisis on the basis of increasing inequalities between wage and profit earners, but also industry and finance. Following its appearance, Stiglitz (2012) explicitly
acknowledges and analyses the link between increasing inequality and the current economic crisis.

Another theory from this classical tradition refers to the declining rate of profit, which results from an increasing ‘organic composition of capital’ (Robinson, 1978). In simple terms, this theory suggests that as capitalism develops, labour saving technical progress leads to an increase in the share of capital to labour (organic composition of capital). Labour-saving technical progress is thought to be favoured by entrepreneurs, because (i) capital intensity reduces average costs and (ii) it mitigates problems associated with labour disobedience and strikes. As value however, is being created only by labour, not capital (according to the classical ‘labour theory of value’) and is appropriated by entrepreneurs as profit, a rising organic composition will lead to a declining rate of profit (Fine and Harris, 1979). As the rate of profit is the major determinant of investment – an idea shared by mainstream macroeconomic theory (for example be both exogenous, Solow, 1956, and endogenous, Romer, 1986, growth theory, the ‘accelerator model’, and in multiplier-accelerator interactions, Mullineux, 1990), economic crises will tend to manifest themselves. In a recent book, Kliman (2011) shows that in his estimates, the rate of profit in advanced capitalist economies has been on a secular decline, as hypothesised by the classics.

Both under-consumption-declining effective demand and rising organic composition-declining rate of profit impact negatively on investment. According to many classical and Marxist scholars, economic crises will tend to induce internationalisation of capital and production in order to mitigate such tendencies towards the crisis (Cowling & Sugden, 1987; Pitelis, 1987). In this context,

7 While Marx himself did not deny the importance of external shocks, he chose to focus on endogenous crisis-inducing factors. In addition, money played a critical role in the Marxist analysis, in particular because commodities had to be sold, thus metamorphosing to money. In this context, a failure of commodities to sell engenders the possibility of a crisis (Kenway, 1987).
developed, crisis-ridden countries will choose to invest in countries where such problems are less acute. This can help explain internationalisation of production, according to authors such as Hilferding (1981, first published in 1910), Lenin (1917) and Luxemburg (1963), see Brewer (1980). As Foreign Direct Investment (FDI), is an important element of international production, one would expect FDI to also take place in countries where the organic composition of capital is lower and/or effective demand is higher. This introduces two hitherto missing new dimensions-first a real economy-supply-side, and second a comparative (developed versus emerging economies) one. Below we explore their significance for inward FDI flows in emerging economies.

To summarize, according to classical political economists, profit rates and investment will tend to decline in developed countries for interrelated reasons such as under-consumption-effective demand and the rising organic composition of capital. This in its turn will motivate firms to migrate to foreign markets in emerging economies, thereby inducing a tendency towards internationalisation of production, outward investment and hence globalisation (Ramirez, 2012).

2.2 De-industrialisation and comparative economic performance

In political economy, the impact of a tendency towards crisis and/or de-industrialisation in developed economies is said to tend to lead to their ‘relative decline’ (Hobsbawm, 1968; Stafford, 1986, 1989). In its original version, the ‘relative decline’ hypothesis focused on specific, in particular, developed economies, such as the UK, and proposed a number of reasons for their relative economic under-performance and decline (Coates & Hillard, 1986). A variant of this theory involved the British ‘Empire’ (Hobsbawm, 1968), whose presence allegedly reduced the
incentive of British firms to innovate, as they could sell (for a period of time) inferior products to their relatively ‘captive’ markets in the ‘Empire’. Another variant referred to the role of the ‘City of London’, whose attempt to maintain a strong pound is said to have helped undermine British competitiveness, by increasing the relative cost of British products (Coakley & Harris, 1983). A third variant referred to institutional and cultural factors, including the lack of trained professional management and a relative dislike of manufacturing, as opposed to services (Stafford, 1986, 1989).

Interestingly some of these concerns have in more recent years resurfaced, quite prominently too. The City is now seen widely as a major culprit of the British malaise and the financial crisis, especially after the recent LIBOR scandal. In his analysis of British competitiveness Porter (2003), considered the quality of British management to be a major challenge and constraint.8

Another variant or ‘relative decline’ proposed both for the UK and the US (Bluestone & Harrison, 1982), attributed such decline to the cosmopolitan nature of their capitals, namely their rather limited commitment to their countries of origin. This implied that internationalization can be seen as a contributor to relative decline of countries, but not necessarily of ‘their’ companies. This de-coupling between the fortunes of some nations and ‘their’ companies is a major theme in IB scholarship, from Hymer (1960/1976) onwards. It has resurfaced recently in the context of the current crisis, not least because of the realisation of the consequences for public finances of MNEs failing to pay taxes, a very topical theme today in the UK and the US. More sinister is the view reported of some CEOs, as to why at all, they should be loyal to their country of incorporation. TIME magazine’s R. Foroohar, for example, cites an Apple executive as saying ‘We don’t have an obligation to solve America’s

8 See also the discussion in the Economist (2010b).
problems.’ Foroohar observes that ‘Economist Clyde Prestowitz, writing in Foreign Policy, notes that while Apple may not feel obliged to solve U.S. economic issues, it expects Uncle Sam to protect intellectual-property rights and to keep waterways safe so that it can deliver its made-in-China products’. In this context, the old accusation towards MNEs that they rely on private appropriation of socially co-created value re-emerges with a vengeance.

Coming back to de-industrialisation, the term has been coined by scholars such as Singh (1977), to refer to a relative decline in the share of manufacturing product and/or employment to GDP. It remains very topical in the UK and more recently Europe (The Economist, 2010b; EC, 2005, 2010). As explained by Rowthorn & Wells (1987), de-industrialisation can be the outcome of structural shifts from industry to services and/or shifting trade specialization to, for example, more capital intensive products. As hitherto developed countries with high manufacturing shares tend to face de-industrialisation, their firms will tend to seek investment opportunities in countries with a higher manufacturing share – the late industrializers. This in turn can help foster a de-coupling between the fortunes of developed and emerging economies (Kose et al., 2008).

De-coupling refers to the idea that the economies of countries such as the BRICs are gradually becoming less dependent on the economies of developed countries, for example for export markets. De-coupling is linked to the business cycle, in that divergence in economic performance between different groups of countries will tend to be manifested in terms of a divergence between their relative business cycles. In this context, the synchronisation of business cycles would tend to reduce

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9 Foroohar, R., Companies are the new countries, TIME, February 13, 2012
the incentive to undertake outward investment, while divergence in the cycles will tend to strengthen it.

The outcome of such tendencies would be to increase FDI in late industrializers. Porter (1990), proposed a variant of this view in positing a positive relationship between domestic investment and outward investment, on the basis of the argument that strength at home motivates FDI. Some early support for a positive link between domestic and foreign investment has been provided by Stevens and Lipsey (1992).

Cross-border investment opportunities can be implemented through various modalities, such as off-shoring, near-shoring, outsourcing, licencing, FDI, non-equity-based forms, etc, UNCTAD (2010). The reasons for inward FDI vs. alternative modalities of internationalisation, such as licencing, has been explored originally by Stephen Hymer (1960/1976), who was writing from a classical, self-proclaimed Marxist vantage point, through much of his writings (Dunning and Pitelis, 2008). Following Hymer, an extensive array of contributors have complemented his view about the importance of FDI on the basis of rivalry reduction, transaction costs, and resource-knowledge-capabilities-learning-based and institutional-evolutionary views, see Brouthers et al. (2003), Brouthers and Brouthers (2003), Brouthers and Nakos (2004), Pitelis and Teece (2010). All but the most recent of these have been encapsulated in John Dunning’s Ownership, Internalisation, Location (OLI) triad, see Dunning and Lundan (2008) for an extensive account.

Despite extensive research in IB scholarship on the determinants of FDI and calls for comparative political economy considerations to be incorporated into IB scholarship (Brouthers, 2013), the aforementioned issues have not found their way into IB scholarship. This is an important limitation and research gap that we aim to
close in this paper. In particular we extend analyses of FDI by incorporating political economy considerations such as de-industrialisation and relative economic performance, and we both conceptualise and test for the ‘relative’-‘comparative’ above, thereby accounting for the de facto ‘opportunity cost’-aspects of investment decisions, that has been previously left unexplored in IB scholarship.

The aim of the next section is to develop hypotheses, and undertake an empirical investigation of the aforementioned theories and our proposed hypotheses on the impact on FDI.

3. Hypothesis Development, Operationalization, data and method

3.1. Hypothesis Development

According to the discussion of the previous section, the de-industrialisation of developed countries will be related in part to the industrialisation of the emerging ones. In particular, de-industrialisation of developed nations will tend to lead to the industrialisation of emerging economies that are not characterised, to the same extent, by factors that foster de-industrialisation such as declining rates of profit and demand, shifting trade patterns and sectoral (manufacturing-services) compositions. In this context the relative de-industrialisation tendencies in developed countries will tend to foster industrialisation in emerging ones by rendering them relatively more attractive locations for (inward) investment.

Put differently, our analysis predicts that the comparative-differential, or ‘relative’ de-industrialisation of developed countries, will tend to lead to higher FDI into emerging economies. Accordingly our first Hypothesis is that,
Hypothesis 1: The relative de-industrialisation of developed countries will lead to higher FDI inflows in emerging economies.

While relative de-industrialisation will tend to favour inward investment into emerging economies, in countries where relative de-industrialisation is coupled with economic underperformance, the opposite is more likely to be the case. Economic underperformance will tend to undermine the ability of firms from underperforming nations to invest abroad, not least by reducing the number of potential investors (new firms) and by reducing the number and rate of growth of the existing ones. While some firms/MNEs may continue to invest in emerging economies, the new sources of inward investments will tend to dry out. Hence, economic underperformance in developed countries will tend to reduce the sources, and hence the size of FDI inflows into emerging economies. Accordingly, our second Hypothesis suggests that,

Hypothesis 2: The economic underperformance of developed countries will lead to lower FDI inflows in emerging economies.

Another important comparative political economy factor that can serve as a potential determinant of FDI inflows in emerging economies is the degree of divergence of their business cycle from that of the developed ones. In particular, the more synchronised business cycles are, the lower the relative attraction of emerging economies will be. This is because in upswings both developed and emerging economies will be attractive for FDI while in downswings both will be unattractive. However, the comparative attractiveness of emerging countries for productive inward
investments, will tend to be lower in the case of more synchronised business cycles. This is in part because of potential increases in the relative risk premium placed by investors in venturing cross-border in cases of generalised hardship, but also because in such cases all productive investments will tend to decline as compared to hoarding and/or more speculative investments. Recent evidence by Rudolph and Schwetzler (2014), for example, shows that the so called ‘conglomerate discount’ fell from 12.7% to 6% in Europe and from 10.8% to 7.2% in the US, during the financial crisis.

The degree of divergences of business cycles can be seen as a measure of decoupling (Kose et al., 2008). Accordingly our next Hypothesis suggests that decoupling, as approximated by the divergence in business cycles, will tend to impact positively on FDI inflows. Hence,

Hypothesis 3. FDI inflows in emerging economies will be positively linked to the degree of business cycle divergence-decoupling.

Below we operationalise and test our hypotheses.

3.2. Operationalization

In order to test our hypotheses, we created the following measures. To test for the impact of de-industrialisation we constructed a variable, which is the ratio of manufacturing share to GDP in emerging economies over the ratio of manufacturing share to GDP in developed ones. The use of manufacturing shares in terms of value added is regarded by the major contributors to this literature to be the most appropriate measure-proxy of de-industrialisation (Rowthorn and Wells, 1987).
According to Hypothesis 1, de-industrialisation in developed countries, would lead to increased FDI in less de-industrialized emerging economies. Therefore, a positive impact of this variable on FDI would support the de-industrialisation fosters FDI into emerging economies view.

On the other hand, economic underperformance was hypothesised to lead to lower FDI inflows in emerging economies. The best available proxy for economic performance in political economy is investment. Indeed this is arguably the one thing that unites economists of all persuasions, neoclassical, post-Keynesian, Marxist and other heterodox, (Kalecki, 1968; Solow, 1994). Accordingly, the variable we constructed is Relative Investment (RI) between emerging and developed economies. This enables the testing of Hypothesis 2.

Concerning our third Hypothesis, the most widely used measure of the business cycle is the rate of unemployment (Rowthorn & Wells, 1987), i.e. the percentage of employed people to the total workforce. This is because the downswings tend to be related to declining employment and vice versa. We construct a variable, which is the ratio of the unemployment rate in the target emerging economy y, divided by that of the developed countries. If the ratio of the denominator goes up (down) faster than that of the numerator, the total ratio decreases (increases), implying divergence of their business cycles. Accordingly, a positive and significant coefficient will support the idea that a divergence between the business cycles of developed versus emerging economies (de-coupling) will tend to foster FDI inflows in emerging economies.

As we noted in the introduction, many other variables impact on FDI into developing countries and it is important to control for these so as to derive as a
complete theory-informed econometric specification, as possible. Towards this purpose we draw on the comprehensive body of research on the determinants of FDI (Dunning, 1980; Lunn, 1980; Kravis & Lipsey, 1982; Nigh, 1985; Schneider & Frey, 1985; Culem, 1988; Grubert & Mutti, 1991; Veugelers, 1991; Wheeler & Mody, 1992; Woodward, 1992; Tsai, 1994; Billington, 1999; Henisz, 2000; Chakrabarti, 2001; Buckley & Ghauri, 2004; Dunning & Lundan, 2008). According to this literature, financial factors such as the exchange rate and the interest rate, the size of the market (GDP and population), (International Business Review, 2010), the growth of GDP, locational advantages such as a strong innovation system, the aggregate efficiency-productivity of the economy (Nachum et al., 2000; Driffield & Love, 2007), the openness of the economy, and institutional factors and political hazards (Henisz, 2000; Brouthers, 2013, Jimenez, 2010; López-Duarte & Vidal-Suárez, 2010), are all important potential determinants of FDI. In our subsequent empirical analysis we control for all these.

3.3. Operationalisation of variables

3.2.1. Dependent variable

The key dependent variable in our research is FDI inflows to emerging economies in constant USD prices (using the CPI as deflator with 2000 as a base year). We use a panel of 27 developing countries over the period 1996-2004. As our sample includes countries of very different size (e.g. China and Croatia) we use a logarithmic transformation that is taking common logarithm of the actual values to
smooth out the series.\textsuperscript{10} The FDI data (direct investment in the reporting economy) come from UNCTAD.

3.2.2. Independent variables

As discussed above, we employed three major independent variables (relative share of manufacturing to GDP, relative investment, and the relative unemployment rate), to test the three Hypotheses we developed earlier. All these variables were constructed as the ratio of the level variable for each particular emerging economy to the weighted average of the same variable for a large sample of developed economies. The weights used were the relative size of the economy, defined as the ratio of the real GDP of each developed country to the total real GDP of all developed countries in the sample in a particular year. In formal terms, each relative variable $X_{it}$ is defined as

$$X_{it} = \frac{X_{it}}{\sum_{j} X_{jt} \cdot w_{jt}}$$  \hspace{1cm} (1)

where $X_{it}$ is a level variable in a developing country $i$ at year $t$, $X_{j}$ is a level variable in a developed country $j$ at year $t$, and $w_{jt} = \frac{\text{GDP}_{jt}}{\text{GDP}_{\text{world},t}}$.

The GDP, investment (gross capital formation) and manufacturing share (manufacturing value added, as a % of GDP) series come from the World Bank’s World Development Indicators, while unemployment data come from the International Labor Organization.

3.2.3. Control variables

\textsuperscript{10} The logarithmic transformation helps making the resulting distribution normal (Ajmani, 2004).
The measures used for the control variables are taken from the extant FDI literature. GDP (in constant 2000 USD), population, exchange rate, and the interest rate (lending interest rate), are as described in the World Development Indicators. We used a relative R&D variable, a measure of the strength of a country’s system of innovation, (Nelson, 1993, 1995) constructed using formula (1) above (the data comes from UNESCO, UN common database). For aggregate efficiency-productivity, we used the relative ratio of GDP to total employment (Porter, 1990; Krugman, 1994), which, again, was constructed using formula (1).

For the quality of the political environment we employed the POLCON Index (Henisz, 2000). The index assesses the quality of the political environment in a country based on a premise that policy outcomes are a function of political structure. It is correlated to a high degree with similar World Bank’s governance indicators, yet has the advantage that it offers significantly longer time series. The higher the index, the higher is the political stability of the country. All these proxies face limitations (Brouthers, 2013), but are the most commonly used in literature. In addition, data for emerging economies are hard to collect and not always sufficiently reliable to justify the construction and use of less conventional variables-proxies.

Last but not least, our focus here is not so much to improve upon extant measures in literature, but rather to address calls to enhance the extant literature on FDI by considering novel comparative political economy determinants that have been under-explored in IB scholarship (Jackson and Deeg, 2008, Brouthers, 2013). This is a major research gap that we aim to close in this paper. The issues we consider moreover are arguably among the most significant in political economy (crises, de-industrialisation, and comparative economic performance of nations) and remain under-explored in IB scholarship (Brouthers, 2013).
3.4. **Method**

We employed a dynamic panel data method (a systems GMM estimator) to estimate our model (Blundell & Bond, 1998). Traditionally, panel data analysis in the FDI area has been conducted using standard panel data techniques without accounting for the effect of the lagged dependent variable. In economics, dynamic panel analysis of FDI is a little more common, see, for example, Mello-Sampayo (2009), Sembenelli & Siotis (2008), and Carstensen & Toubal (2004). By applying this method, our study introduces three somewhat novel methodological features in the area of FDI analysis.

Firstly, we offer a richer model specification that allows for adjustment dynamics by including the lagged dependent variable (LDV) as a separate regressor. Earlier studies that used panel data did not account for the effect of the LDV since traditional panel data methods produced biased estimates in this case. Systems GMM, by offering consistent estimates in the presence of the LDV, allows accounting for a country’s prior ability to attract FDI (that was shown to have a significant impact on current FDI inflows in cross-sectional studies) and also improves consistency of other parameters of interest (Bond, 2002).

Secondly, prior empirical tests of FDI determinants were conducted under a rather strong assumption of strict exogeneity of the parameters (neglecting any possible linkages among independent variables). However, FDI and its determinants are likely to be jointly determined. Consequently, by accounting for reverse causation, we offer more consistent estimates. Finally, we address unobserved heterogeneity in the data by allowing the country fixed effects to be correlated with the error term.
Our estimates are produced with an assumption of no serial correlation in the error term that is crucial for the consistency of estimators. Arellano and Bond (1991) have suggested using tests for first- and second-order serial correlation in the differenced residuals \((m1 \text{ and } m2)\) to cross-check the validity of the instruments (orthogonality of differenced residuals is a crucial assumption of the method). Following Blundell and Bond (1998), we report results for one-step weighting matrix with heteroskedasticity-consistent standard errors. It was suggested that asymptotic inference based on the one-step versions may be more reliable than asymptotic inference based on the two-step versions even if the sample is moderately large (ibid.).

3.5. Data sample

Our sample includes 27 emerging economies, which have received annual FDI inflow of more than USD 0.5bn according to UNCTAD (2006). We also gathered data on 22 developed countries (mostly OECD) to calculate the relative variables. The time series cover a 9-year period (1996-2004). Because of the time dimension of our data set, some of the more recent EU members were classified as developing countries to reflect the level of the country’s development during the period to which our data refer (Zaghini, 2005). The full list of countries is shown in Table 1 and the descriptive statistics and correlations in Table 2.

4. Empirical findings

We adopted the ‘general to specific’ approach (Hendry, 1983). This involves estimating first the most general equation, derived from the theory, and then
eliminating sequentially the least significant variables, until we reached the equation which is most favoured by the data itself. A strength of this approach is that it reduces significantly the scope of ‘data mining’ by the researcher. The preferred specification by the data is reported in Table 3.\textsuperscript{11} We kept some of the insignificant variables in, in order to use as instruments in the equation. We also performed a test of validity of the estimation method (GMM) in the data set under investigation by testing the assumptions of the model. In particular we tested for zero auto-correlation in the first differenced errors and high autocorrelation in the second differences. The resulting p-values are reported in Table 3 and confirm the validity of the assumptions.

Our results offer direct tests of the hypotheses formulated above. In particular, the relative manufacturing share has been found to have a positive and significant effect on FDI inflows into the emerging economies. This result supports the de-industrialisation Hypothesis (Hypothesis 1). When the share of manufacturing grows more slowly in the developed world than in the emerging one, the relative manufacturing share goes up resulting in the increase in FDI into the latter.

We also found that the impact of relative investment is highly significant and negative. This means that when investment decreases at a faster rate in the developed countries than in the emerging ones (that is relative investment goes up) this results in a decline of FDI inflows into the latter. This supports the hypothesis that underperformance will lead to declining FDI inflows into emerging economies (Hypothesis 2).

The impact of the relative unemployment rate was found to be positive and significant, which supports the idea that the divergence in business cycles-de-coupling fosters FDI into emerging economies (Hypothesis 3).

\textsuperscript{11} A number of other regressions have been run with similar results. These are not reported to economize on space, but are available from the authors on request.
Turning to our control variables, the relative GDP to employment ratio has been found to have a highly significant negative effect on FDI flows. When the ratio of GDP to employment declines at a faster rate in the developed countries (indicating lower productivity-underperformance of the developed countries), this causes FDI in the emerging economies to decline. This adds support to the ‘relative under-performance-’ hypothesis.

The relative R&D expenditure is also highly significant and positive implying that as R&D expenditure grows faster in the emerging economies, it will lead to more FDI inflows to emerging economies. This suggests that R&D can be viewed as an important locational advantage (Dunning and Lundan, 2008).

Our other control variables also have signs and significance levels which are in line with extant theory and expectations. In particular, we found a significant and positive impact of GDP on FDI, while the interest rate and population have a significant negative effect. These are in line with the balance of previous results-evidence, summarised in Dunning and Lundan (2008). POLCON is positive but has failed to produce a significant coefficient. This could be in line with arguments for more nuanced measures of political-institutional environments (Brouthers, 2013) and/or be the result of limitations of our study (see below)—we would be reluctant to question the importance of the comparative political stability as a determinant of FDI inflows. Overall the results are in support of the hypotheses, relating to de-industrialisation, relative decline, and the synchronisation of business cycles-de-coupling. It is worth noting that our analysis and results represent a first step towards conceptualising and testing for these important comparative political economy-based relationships, hence answer to recent calls for the need to do so (Brouthers, 2013). Our use of a novel and unique set of panel data we collected, the adoption of a
‘general to specific’ approach, and the fact that we account for reverse causation, alongside the robustness of the results are further advantages and contributions of the paper.

A limitation arises from our relatively small sample. Although we gathered data for 35 developing countries over a 20-year period, the data had big gaps with a number of variables missing altogether for a number of countries. In particular, R&D expenditure was only available for 1996-2004, which determined the time frame of our sample. The complexity of calculation of some of our explanatory variables such as the use of relative variables, (which, however, was essential for the purposes of testing our hypotheses), and the scarcity of data for some variables (notably R&D expenditure), resulted in a loss of a significant number of observations. We managed to calculate 174 data points for the relative R&D variable (see Table 2), and, when combined with other variables, which also had some missing observations, reduced the sample to 103 observations overall.

5. Discussion, summary, conclusions, policy implications, limitations and further research

The emergence and growing global importance of the BRICs, alongside the new emerging powers, as well as the dramatic rise of FDI received by the emergent and emerging world, are arguably of immense consequence for the world as we know it. Not a day passes by without discussion of the role of China and India, in this brave new world, the emerging multi-polarism, the need for a new model of supra-national governance. The BRICs are widely regarded as potential saviours of the now declining West, yet not always without fear of the potential ramifications (Morgan et al, 2013).
Despite the above and the related continuing calls for the need to incorporate comparative political economic considerations into the analysis of IB and FDI (Brouthers, 2013), the relationship between relative de-industrialisation tendencies, relative economic performance and the degree of divergence of business cycles-de-coupling, have been totally ignored in IB scholarship, both conceptually and empirically. In this context, in this paper, we identified the aforementioned research gaps and aimed to close them, by conceptualising and testing three comparative political economy-derived Hypotheses.

In particular our paper critically assessed and synthesized alternative comparative political economy-based theories of de-industrialisation and relative economic performance, and conceptualized their relationship with internationalisation of production and FDI, paying particular attention to FDI inflows in emerging economies. In so doing, we broadened the extant body of literature on the de-industrialisation and relative economic underperformance, by extending the area of inquiry to incorporate their impact not only on domestic investment, but also on investment in foreign locations. Hence, we cross-fertilised established thinking in comparative political economy and the core of IB scholarship, notably FDI, thereby answering calls to extend IB scholarship by incorporating comparative political economy (Brouthers, 2013).

Importantly, we have contributed to both sets of literatures by paying serious attention to the word ‘comparative’. While the issue of FDI inflows is comparative by definition, as MNEs always have alternative options to invest (Brouthers, 2013), no study has previously addressed this ‘opportunity-cost’-related issue by devising comparative measures-explanatory variables. We consider this to be a unique and
important innovation that opens up new avenues for further research in by IB scholars.

In addition to our conceptual and empirical innovations, we devised operational measures, and also made some rather significant methodological innovations – by using dynamic panel data analysis and employing a ‘general to specific’ approach. In this context, our paper aimed to add value on multiple levels, including conceptual, empirical and methodological. Using a dynamic panel, we offered some novel features in the area of FDI analysis. First, explanatory variables were no longer treated as exogenous – the estimation procedure took into account possible linkages among them and the dependent variable. Secondly, by allowing the country fixed effects to be correlated with the error term, it was possible to address the unobserved cross-country heterogeneity in the data, hence tackling the omitted variable problem.

Our results provided support to our hypotheses on the relationship between de-industrialisation, relative underperformance and degree of business cycle synchronisation-de-coupling and FDI inflows into emerging economies. They were robust and free of known major econometric problems. We also employed a large number of theory-informed control variables. Many of these were important in their own right, such as R&D, country size, and also exchange rates. With the exception of POLCON, their signs were also in line with the extant literature, thus adding weight to the existing evidence in their support.

Our results help provide useful implications for policy makers and practitioners. In terms of public policy, first, they support the idea that that the loss of manufacturing capabilities can eventually harm national economic competitiveness, despite possible short term cost reduction benefits (Teece, 1986; Porter, 1990; Pisano
This view is reflected in the return of renewed debates on the importance of manufacturing and the arguments that a manufacturing-based reindustrialisation strategy for growth can be important (EC 2010, 2011; Warwick, 2013; Pitelis, 2014).

Our findings on relative performance-decline are reflected in the currently popular fears about de-globalisation. They support the view that a strong diversified economy is needed for globalisation to resume. This again can be fostered through suitable policies in support of re-industrialisation (Warwick, 2013; Pitelis, 2014).

Policies that support a balanced and diversified economy (and economic policy) in terms of sectoral composition, large-sized firms and (SMEs) clusters, the public-private-polity nexus, the macro-micro policy mix, and the mix between market-hierarchy and co-operation-co-opetition, are more likely to foster sustainable economic performance in both developed and emerging economies, hence foster global sustainable value creation (Mahoney et al., 2009) better than more singular, dogmatic policies such as those of the so called Washington consensus-recent austerity drive (Cowling and Tomlinson, 2011).

While developing these ideas further is beyond the intended contributions of this article, recent works by Klein et al. (2010) and Mazuccato (2013), among others, support and elaborate further these arguments. In addition our evidence on the synchronisation of the business cycle-de-coupling points to the need for national and supra-national level policies, which aim to foster a degree of divergence between the business cycles, so as to avoid the possibility of a global crisis. In terms of managerial practice, our results suggest that MNE decision making on foreign operations, including FDI, should be informed by knowledge-predictions on relative economic performance, business cycle and de-industrialisation tendencies. In the absence of
these, mistakes can be made, which are quite independent of the accuracy of a decision to select a modality of entry for transaction costs, institutional, capability-related and other reasons, which are almost the exclusive focus of IB. This observation too answers to and supports calls for a more comparative political economy-engrained analysis of FDI (Brouthers, 2013).

As noted our results are subject to limitations. For example a larger data set would afford more comfort on the validity of our findings. Then again, we collected and employed the best and longest series of data available, and these very important issues cannot be left unexplored without loss of value. We hope to motivate others to pursue this line of research that brings together political economy and IB, as one way of rendering IB more relevant to the current challenges we are facing, not least the economic crisis, de-industrialisation, and relative economic performance, as they impact on the sustenance of the globalisation drive and on world-wide value creation.
Appendix

Table 1

The countries used in the analysis

<table>
<thead>
<tr>
<th>Number</th>
<th>Developing Countries</th>
<th>Developed Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Argentina</td>
<td>Austria</td>
</tr>
<tr>
<td>2</td>
<td>Brazil</td>
<td>Belgium</td>
</tr>
<tr>
<td>3</td>
<td>Chile</td>
<td>Czech Republic</td>
</tr>
<tr>
<td>4</td>
<td>China</td>
<td>Denmark</td>
</tr>
<tr>
<td>5</td>
<td>Croatia</td>
<td>Finland</td>
</tr>
<tr>
<td>6</td>
<td>Ecuador</td>
<td>France</td>
</tr>
<tr>
<td>7</td>
<td>Egypt</td>
<td>Germany</td>
</tr>
<tr>
<td>8</td>
<td>Estonia</td>
<td>Greece</td>
</tr>
<tr>
<td>9</td>
<td>India</td>
<td>Hungary</td>
</tr>
<tr>
<td>10</td>
<td>Korea</td>
<td>Iceland</td>
</tr>
<tr>
<td>11</td>
<td>Latvia</td>
<td>Ireland</td>
</tr>
<tr>
<td>12</td>
<td>Lithuania</td>
<td>Italy</td>
</tr>
<tr>
<td>13</td>
<td>Mexico</td>
<td>Japan</td>
</tr>
<tr>
<td>14</td>
<td>Pakistan</td>
<td>Netherlands</td>
</tr>
<tr>
<td>15</td>
<td>Panama</td>
<td>New Zealand</td>
</tr>
<tr>
<td>16</td>
<td>Peru</td>
<td>Norway</td>
</tr>
<tr>
<td>17</td>
<td>Poland</td>
<td>Portugal</td>
</tr>
<tr>
<td>18</td>
<td>Romania</td>
<td>Slovak Republic</td>
</tr>
<tr>
<td>19</td>
<td>Russian Federation</td>
<td>Spain</td>
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<tr>
<td>20</td>
<td>Singapore</td>
<td>Sweden</td>
</tr>
<tr>
<td>21</td>
<td>Slovenia</td>
<td>United Kingdom</td>
</tr>
<tr>
<td>22</td>
<td>Thailand</td>
<td>United States</td>
</tr>
<tr>
<td>23</td>
<td>Trinidad and Tobago</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Tunisia</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Turkey</td>
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<tr>
<td>26</td>
<td>Uruguay</td>
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<tr>
<td>27</td>
<td>Venezuela</td>
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Table 2

Descriptive statistics and correlations

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<th>Variable</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Log (Real FDI flows)</td>
<td>2.91</td>
<td>2.77</td>
<td>-4.67</td>
<td>23.86</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Relative Investment (real)</td>
<td>0.04</td>
<td>0.07</td>
<td>0.00</td>
<td>0.65</td>
<td>-0.30</td>
<td>-0.41</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Relative Unemployment</td>
<td>1.45</td>
<td>0.89</td>
<td>0.16</td>
<td>5.21</td>
<td>-0.30</td>
<td>-0.41</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Relative Manufacturing Share</td>
<td>1.75</td>
<td>1.47</td>
<td>0.39</td>
<td>10.28</td>
<td>0.42</td>
<td>0.51</td>
<td>-0.55</td>
<td>1.00</td>
<td></td>
<td></td>
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<tr>
<td>5 Relative GDP to Employment</td>
<td>0.04</td>
<td>0.11</td>
<td>0.00</td>
<td>1.49</td>
<td>0.39</td>
<td>0.60</td>
<td>-0.43</td>
<td>0.44</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>6 Relative R&amp;D Expenditure</td>
<td>0.67</td>
<td>5.22</td>
<td>0.00</td>
<td>67.96</td>
<td>0.05</td>
<td>0.01</td>
<td>-0.09</td>
<td>0.19</td>
<td>0.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7 Exchange Rate</td>
<td>576.70</td>
<td>2266.35</td>
<td>0.00</td>
<td>15858.92</td>
<td>-0.16</td>
<td>-0.03</td>
<td>-0.09</td>
<td>-0.10</td>
<td>-0.03</td>
<td>0.01</td>
<td>1.00</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8 Log(Real GDP)</td>
<td>24.58</td>
<td>1.43</td>
<td>21.76</td>
<td>28.27</td>
<td>0.80</td>
<td>0.73</td>
<td>-0.40</td>
<td>0.54</td>
<td>0.47</td>
<td>0.05</td>
<td>-0.11</td>
<td>1.00</td>
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<tr>
<td>9 Interest Rate</td>
<td>299.35</td>
<td>5561.90</td>
<td>4.82</td>
<td>121906.00</td>
<td>-0.19</td>
<td>-0.23</td>
<td>0.13</td>
<td>-0.23</td>
<td>-0.20</td>
<td>-0.01</td>
<td>0.13</td>
<td>-0.13</td>
<td>1.00</td>
<td></td>
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</tr>
<tr>
<td>10 Log(population)</td>
<td>16.83</td>
<td>1.70</td>
<td>13.98</td>
<td>20.99</td>
<td>0.77</td>
<td>0.74</td>
<td>-0.43</td>
<td>0.51</td>
<td>0.50</td>
<td>0.04</td>
<td>-0.04</td>
<td>0.91</td>
<td>-0.09</td>
<td>1.00</td>
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<tr>
<td>11 POLCON</td>
<td>0.34</td>
<td>0.21</td>
<td>0.00</td>
<td>0.69</td>
<td>-0.42</td>
<td>-0.60</td>
<td>0.16</td>
<td>-0.21</td>
<td>-0.30</td>
<td>0.03</td>
<td>-0.13</td>
<td>-0.39</td>
<td>0.19</td>
<td>-0.53</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Table 3

Results

*Instruments: FDI, Population, GDP, exchange rate, interest rate and POLCON*

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Log(FDI Flows)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Real, Developing Countries</em></td>
<td></td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
</tr>
<tr>
<td>Relative Investment (real)</td>
<td>-3.66***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
<tr>
<td>Relative Unemployment Rate</td>
<td>0.42**</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
</tr>
<tr>
<td>Relative Manufacturing Share</td>
<td>1.00**</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
</tr>
<tr>
<td>Relative GDP to Employment Ratio</td>
<td>-0.34***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
<tr>
<td>Relative R&amp;D Expenditure</td>
<td>0.01***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
<tr>
<td>Lagged log(FDI Flows)</td>
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</tr>
<tr>
<td></td>
<td>(0.48)</td>
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<tr>
<td>Exchange Rate</td>
<td>-0.00</td>
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<td></td>
<td>(0.81)</td>
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<tr>
<td>Log(Real GDP)</td>
<td>2.91***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
<tr>
<td>Interest Rate</td>
<td>-0.01*</td>
</tr>
<tr>
<td></td>
<td>(0.06)</td>
</tr>
<tr>
<td>Log(population)</td>
<td>-15.29***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
<tr>
<td>POLCON</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>(0.20)</td>
</tr>
<tr>
<td>Constant Term</td>
<td>12.827</td>
</tr>
<tr>
<td></td>
<td>(0.134)</td>
</tr>
<tr>
<td>First order serial correlation test</td>
<td>-2.33**</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
</tr>
<tr>
<td>Second order serial correlation test</td>
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<td></td>
<td>(0.98)</td>
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<tr>
<td>Wald (joint) test</td>
<td>3441.74***</td>
</tr>
<tr>
<td></td>
<td>(0.00)</td>
</tr>
<tr>
<td>Number of observations</td>
<td>103</td>
</tr>
</tbody>
</table>

p-values in parentheses,
***significant at 1% level, ** significant at 5% level, * significant at 10% level
References


Authors’ Vitae

Alina Kudina is a Visiting Professor of International Business at City University London and an Associate of the U.K.’s Advanced Institute of Management Research. She has a background in Economics having previously worked for the International Monetary Fund, the World Bank and Harvard Institute for International Development. Alina did her PhD at Said Business School, University of Oxford and held Lecturer positions at University College London and Warwick Business School later on. Alina’s research focuses on the issues related to foreign direct investment, internationalisation strategies, and public policy. Her research is published among other journals such as Global Strategy Review, Long Range Planning and Multinational Business Review.

Christos Pitelis is the Professor of Sustainable Global Business, and Director, Centre for International Business and Management (CIBAM), School of Management, University of Bath. His research interests cover core themes of International Business and Strategic Management, as well as the governance of globalization and strategies for the sustainable competitive advantage (SCA) of nations, including clusters, foreign direct investment, and industrial and innovation policies. He is interested in the sustainability of value and wealth creation and capture by business organizations and nations in today’s semi-globalised knowledge-based economy, as well as in devising governance structures and strategies for sustainable global value creation that aligns corporate, public and supranational governance, and foster SCA but also global system-wide economic sustainability. He has published among other journals in Organization Science, Journal of International Business Studies, Organisation Studies, Management International Review, Industrial and Corporate Change and International Business Review.