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REJUVENATING 'OLD EUROPE': TOWARDS A STRATEGY FOR REINDUSTRIALISATION AND SUSTAINABLE COMPETITIVENESS*

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We draw on the theory and practice of international competitiveness and developmental industrial policy (DIP), in order to propose a strategy for reindustrialisation and sustainable European international competitiveness. We suggest that European policymakers should take stock of shifts in the global landscape and leverage ideas from business strategy to build sustainable competitive advantage, but in a way that also fosters system-wide economic sustainability. We propose business strategy-inspired specific measures to achieve this, based on an integration of some commonly perceived 'dichotomies' in extant debates on DIPs, but also submit that the path to European economic rejuvenation will remain fragile and precarious, as long as the requisite institutional and organisational infrastructure is not in place, and wider structural and policy challenges of modern market economies, notably embedded power structures and corruption, are not properly addressed.

JEL Classification: O14; O25; L52; O38; M2

'Is the reason we all talk so much about growth that we understand so little about it?'
(Rodrik, 2005, p. 1009)

I. INTRODUCTION

Europe is at a crossroads. The financial, sovereign debt and economic crisis and their potential implications for growth have rendered 'growth talk' the order of the day among academic economists, policy-makers, and journalists. A problem with the majority of such 'talk', at least in academic circles is that it focuses mostly on

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¹ See for example, Aghion et al. (2011) and McFadden (2012), The Economist, 5 May 2012, 'Going for growth, but how?', 12 May 2012, 'Ode to Growth' and 21September 'The new Intervention', EC (2010a,b 2011) and Warwick (2013).

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macroeconomics and macroeconomic policy, at the expense of microeconomic, supply side factors and microeconomic policy, such as developmental industrial policy (DIP).

The recent success of countries such as Brazil, Russia, India, and China (BRICS), which have relied on 'State Capitalism' and supply side DIPs, has helped contribute to renewed interest on the role of the state and industrial policy (IP), in economic development. DIP is no longer a 'dirty word': it is quite openly entertained in fora, such as *The Economist* and the *Time* magazine. In the latter, for instance, Fareed Zakaria observed that IP is so clearly successful in so many countries that perhaps we should employ it, despite the fact that we lack a supporting theory. While useful in recognising the need for microeconomic policy, we claim below that such statements fail to acknowledge that there is a body of theoretical/conceptual ideas behind DIP—it is just not the neoclassical economics one.

Our paper revisits the issues of international competitiveness and DIPs with an eye to devising a European strategy for rejuvenation and sustainable international competitiveness. It draws on both neoclassical and classical economics, and it submits that nations, like business, should be after the sustainable capture of co-created value. Accordingly, national public policies would benefit from ideas and tools borrowed from business strategy. We also suggest, however, that, unless modern capitalism addresses the problem of embedded and concentrated power structures (hence corruption in its broad sense), the sustainable economic rejuvenation of Europe, and more widely Western economies, will remain elusive and fragile.

The next section revisits debates on international competitiveness. It critically assesses extant perspectives, points to their limitations, and proposes a novel metaclassical synthesis and extension. The following section revisits DIP, in theory and practice, focusing on the case of Europe. Following on from these, we provide an agenda for a business strategy-informed sustainable European international competitiveness that leverages the aforementioned ideas, in the context of new conceptual thinking and shifts in the global landscape. The last section concludes and discusses limitations.

II. INTERNATIONAL COMPETITIVENESS AND DIPS

II. a Extant Perspectives on International Competitiveness

'International competitiveness' is an elusive and controversial concept. Krugman (1994) has famously lamented the 'dangerous obsession' of policy-makers with 'national competitiveness'. For him 'competitiveness' makes sense at the level of firms, but not nations. In his view, the best way to improve nation-wide economic performance is increasing total factor productivity (TFP).

Krugman's argument is unconvincing for various reasons. First, there is no inherent reason why one should not be able to define international competitiveness. In a

² See F. Zakaria's article in *TIME* magazine on 'The case for making it in the USA', published on 6 February 2012.

generic sense, 'competitiveness' can be taken to refer the ability of any economic entity to outperform its 'peers', in terms of what is commonly perceived as a shared objective. For example, if the objective is higher growth of per capita GDP, a country that outperforms others in terms of this objective in a sustainable way can be defined as more internationally 'competitive'. This can be achieved through rivalristic actions (such as strategic trade neo-protectionist policies), co-operative actions (such as knowledge exchange transfer), a combination of the two, or even without much interaction with other countries; a country can, theoretically at least, outperform its peers in this definition, without even engaging in trade if its performance in terms of the commonly pursued objective is superior to that of other countries. Such a generic definition can be, and often is, applicable to individuals, firms, regions, and even universities and courses. What changes are the peer group and thus the 'perceived as shared objective'.

A second important limitation of Krugman's argument, shared by many economists of many persuasions, is that it presumes that value creation achieved through efficiency/TFP will always be translated into value capture. There is no guarantee for this, as all business knows so well. In some cases, value created by an inventor–innovator is either not realised due to lack of demand and/or is captured by competitors with complementary assets and capabilities (Teece, 1986; Pitelis, 2009a). We take up this important issue later.

In brief, one can distinguish four major extant frameworks on international competitiveness and DIPs: the neoclassical economic theory-based-Washington consensus, the Japanese-Far Eastern practice-based approach with the more recently discussed 'Beijing Consensus', the 'systems of innovation'/'varieties of capitalism' perspective, and Michael Porter's work on the Competitive Advantage/'Diamond' of Nations. These tend to overlap on some aspects, but are usually presented as separate in extant literature (see Pitelis, 1998, 2009a).

The neoclassical theory of international competitiveness focuses first on nation-wide growth fostered by appropriate international trade. 'Growth theory' goes back to the landmark contribution of Solow (1956), in which capital and labour could be argued to explain ca. 30% of growth, with ca. 70% attributed to 'exogenous' technological change. More recently, the 'endogenous growth' theory, with important contributions by Lucas (1988) and Romer (1986, 1990), aimed to capture the endogenous role of 'technical change', human capital, and 'increasing returns'; see Solow (2000) and Fine (2000) for critical assessments. Suffice it to note that neither Solow (from a mainstream neoclassical) nor Fine (from a heterodox) perspective, respectively, is impressed with the conceptual, empirical, and policy implications of the new theory.

In international trade, neoclassical theory built on the idea of Ricardo (1817) that free trade, based on comparative productivity-related advantages, can benefit all nations. The Heckscher, Ohlin, Samuelson (HES) model relied on comparative advantage (abundance) in factor endowments, and supported the Ricardian prescription for free trade, under conditions of non-increasing returns; see Samuelson (1962). More recently, 'new trade' theorists, such as Krugman (1987, 1989), questioned the

predictions of the HES model, for situations involving imperfect competition, increasing returns, spill-over effects, and first-mover advantages. In such cases, Krugman showed that strategic trade policies in support of some sectors and firms could favour a nation that employs them (Krugman, 1992). On the other hand, however, such policies were said to be prone to conflicts over the division of benefits and plagued by the possibility of 'government failures' (in identifying the right sectors/firms), as well as retaliations by other nations/'trade wars'. These could lead to lose–lose situations (Boltho & Allsopp, 1987).³

The 'endogenous growth' and 'new trade' theories reinvented ideas from post-Keynesian scholars such as Kaldor (1970), Robinson (1977), Pasinetti (1974, 2009), and earlier List (1845); see Freeman (2004) and Pitelis (2012b). Unlike these last mentioned authors, however, the theories of their modern counterparts are arguably ill-equipped to deal with the creative role of markets (as opposed to their allocative functions, once they exist), and with resource creation, not just through efficient allocation of 'scarce' resources (Pasinetti, 2009; Pitelis, 2012c). This weakens their usefulness in providing policy prescriptions; see Audretsch (1989), North (1994), Amsden (1997), Nelson & Winter (2002), Kaldor (1972), Freeman (2004), Rodrik (2005), and more recently, Coase (2012).

Macroeconomic policy prescriptions deriving from the conceptual foundations of the neoclassical economic perspective have been encapsulated in variants of the so-called Washington and post-Washington Consensus. These emphasise the role of free markets, free trade, privatisation, and deregulation; see Williamson (1990). Their record has been questionable; see Stiglitz (2001), Rodrik (2005), Serra & Stiglitz (2008), Cowling & Tomlinson (2011). For Stiglitz (2001), this approach to development 'misunderstands the nature of the transformation itself—a transformation of society, not just of the economy' (p. xiv).

A second approach on international competitiveness is that adopted by the Japanese Government during the post-World War II reconstruction, by the 'tiger' economies of East Asia, and more recently by China. Hence, the approach can be defined as the 'Japanese/East Asian' (Pitelis, 2007).

An important characteristic of the Japanese/East Asian approach was the DIP of the state in partnership with business and with the explicit aim to restructure the economy and create competitive advantages, as opposed to solely leveraging existing comparative ones (Lin & Chang, 2009). Elements of the industrial competitiveness strategies of Japan, devised and implemented by the Ministry of Economy, Trade and Industry (METI, formerly known as Ministry of International Trade and Industry—MITI), included the targeting and support of specific firms and sectors perceived to be important in terms of high value-added, high-income elasticity of demand, and oligopolistic structures with high profit margins. These were protected from international competition through managed-trade policies. Intra-sector competition was managed

³ In the case of high adjustment costs, characterising the case of inter-industry trade, these problems could be accentuated; see Krugman (1989, 1992) and Deraniyagala and Fine (2001).

too, in that in each sector the major players should not be too many in order to allow critical mass and reduce resource dissipation, but not too few either, so as to avoid collusive practices and engender workable competition. In effect, that was managed, locally based big-business competition. To ensure the flow of technology in the absence of foreign direct investment (FDI), which was discouraged, MITI pursued a policy of buying licenses from foreign firms. To foster competition for big players, hence a more level-playing field, MITI required that firms purchasing licences would make them accessible to smaller players; see Johnson (1982), Best (1990), Pitelis (1994, 1998), Freeman (2004), and Cowling & Tomlinson (2011).

In addition to the above state-orchestrated policies, Japanese firms pursued a strategy of growth and market share acquisition, not short-term profit/'shareholder value' maximisation, in the expectation that through scale, learning, and increasing returns, they could eventually outperform their western 'rivals' (Best, 1990). Additional characteristics of this approach included innovative business practices, for example just-in-time, life-time employment, worker participation, and total quality management. These have been widely discussed in the literature and were felt by many scholars to have contributed to the remarkable performance of the Japanese economy, up to the late 1980s, when it was leading global markets in sectors such as electronics, semiconductors, and automotives; see Amsden (1989), Shapiro & Taylor (1990), Wade (1990), Aoki (1990), Grabowski (1994), and Freeman (2004).

Variants of the Japanese approach were adopted by countries such as South Korea, Taiwan, and Singapore, and more recently, by China (Chang, 1994; Nolan, 2001; Lin, 2011) as well as newer 'tigers', such as Thailand, Malaysia, Indonesia (Jomo *et al.*, 1997), and Vietnam (Chesier & Penrose, 2007). Compared with the Japanese approach, smaller economies such as Taiwan, Singapore, and Malaysia chose to encourage FDI, as much as practicable and in a way that was perceived to be aligned to the overall international competitiveness strategy (Pitelis, 1994; Jomo *et al.*, 1997).

The Chinese DIP arguably represents a synthesis and enrichment of previous experiences with the ubiquitous 'Chinese characteristics'. For Rodrik (2005), this included institutional innovations that were seen as fit for purpose and worked up to a point (such as Town and Villages Enterprises), while for Lin (2011), it was the gradualist comparative advantage-friendly approach that made the trick. No one questioned the use of DIPs by China, or its leveraging of 'State Capitalism', and its unprecedented in human history growth record. This is despite different views as to the extent to which the policy was comparative advantage-following or defying (Lin & Chang, 2009).

The apparent success of the Chinese approach and its more recent influence in other emerging economies, notably in Africa, have led to talk of a 'Beijing Consensus', which is meant to be more pragmatic, experimental, business-like, and arm's length

⁴ For a more detailed-nuanced account of similarities and differences between the various East Asian countries, see Shapiro and Taylor (1990) and Rodrik (2005). For differences between older and newer 'tigers'; see Jomo et al. (1997).

(for example, without the 'conditionality' imposed by Western countries and institutions. Despite criticisms, commentators across the board now widely recognise that the Chinese miracle is unlikely to have been effected without State Capitalism and DIPs (Rodrik, 2009; Lin & Chang, 2009; Cowling & Tomlinson, 2011).

A third approach to international competitiveness includes contributions under the evolutionary, resource-capabilities, and system-based banners. Much of this has been encapsulated in the 'systems of innovation', agglomeration and clusters, and 'varieties of capitalism'-related literature; see Lundvall (1988), Krugman (1991a,b), Nelson (1995), Freeman (1995, 2004), de la Mothe & Paquet (1997), Fagerberg et al. (2005), Jackson & Deeg (2006), Lundvall (2007), Pitelis (2009b), and Cimoli et al. (2009). A characteristic of the evolutionary and system-based views is a focus on intertemporal efficiency through innovation, alongside a belief that the latter is best promoted through big-business competition and system-wide linkages and interactions (Freeman, 1995; Deeg, 2007). The strength, or otherwise, of the innovation system depends on system-wide linkages and on government policies and institutions. Markets are but a part of the system. They need not be 'perfectly competitive' indeed, big-business competition may well have innovation-promoting advantages; see Nelson (1995) and Nelson & Winter (2002). In addition, the existence and promotion of agglomeration and clusters by small- and medium-sized enterprises (SMEs) is seen as a potent means to promote linkages, diversity, and innovation (Metcalfe, 2003; Wignarajah, 2003; Fagerberg et al., 2005; Cowling & Tomlinson, 2011; Pitelis, 2012a).

While the 'systems perspective' departs from neoclassical economics in that it focuses on the supply side, production side of the economy and on microeconomic policies, it shares with neoclassical economic theory a focus on value creation through efficiency, at the expense of value realisation, and appropriation/capture. Hence, it fails to pay attention to the possibility we mentioned that the potential benefits from innovation, efficiency, and value creation need not always be realised in the market place due to lack of effective demand, and/or any realised benefits may not be captured by the innovators themselves (Teece, 1986, 2006; Pitelis, 2009b).

The fourth approach to international competitiveness examined here avoids this problem. Porter's (1990) 'Diamond' of National Competitive Advantage suggests that the coexistence of appropriate factor conditions, demand conditions, firm and industry structure and strategy, and related and supporting industries engender a 'Diamond' of economic success-international competitiveness. While many of the elements of the 'Diamond' are present in extant works, ⁵ Porter added new insights, not least the role of demand, as well as business strategy and structure. Business strategy is important, as it can help shift focus to value capture (a main concern of firms), not just efficiency and value creation.

⁵ For example 'factor conditions' in the HOS model, demand conditions in Vernon's (1966) work on the 'product life-cycle', related and supporting industries in the works of Marshall (1920), and literature on clusters (see Best, 1990; Edquist, 2005; Pitelis, 2012a), industry structure, and rivalry in IO; see Tirole (1988).

To varying degrees, all approaches discussed so far fail to deal adequately with the issue of the interaction between value creation and value capture and the impact of value capture strategies on system-wide sustainability, and hence, the sustainability of any competitive advantages enjoyed by the nations in question. We turn to this issue later.

II.b Extant Perspectives on DIPs

The precise definition of IP has been a matter of dispute (Pitelis, 1994; Warwick, 2013). This has not deterred the emergence and current revival of an extensive literature on the issue revisited briefly below. Generically, IP refers to a set of measures taken by a government that aim to influence the performance of firms, sectors, industries, and clusters towards a desired objective, as well as the financial, human, and organisational resources and organisational and contingency arrangements made, in order to implement this objective. IP originally referred to manufacturing, but this has gradually shifted, not least because of the increasing interdependence between manufacturing and services, and even agriculture (Rodrik, 2004). For instance, today firms such as IBM, Rolls Royce, and Xerox, rely on their manufacturing expertise in order to provide specialist services. A number of agro-business clusters involve the co-location and complementarity of agricultural and manufacturing activities (Galvez-Nogales, 2010). In this context, we can define IP as public policy measures aiming to have an appreciable effect on the competitiveness of manufacturing, directly and/or through impacting on supporting and complementary activities and sectors. DIP in this context, also referred to as industrial strategy (IS), goes beyond IP, in that they involve purposive strategic intent, planning, and actions by the public sector to shape, extend, create, and co-create markets and ecosystems, as opposed to merely setting the 'rules of the game' (institutional framework), or focusing on solving 'market failures'. DIPS can even often help to create 'market failures', so as to foster a wider developmental perspective (Pitelis, 1994; Cowling & Tomlinson, 2011).

Anti-trust in the USA or competition policies (CPs) in the above context refer to the stance governments adopt towards competition and co-operation (co-opetition) between firms, in sectors, and clusters. The boundaries between industrial/competition-anti-trust, and other types of public policies such as technology, innovation, regional, structural, competitiveness, and even macroeconomic are not always obvious. The closest one can get to a demarcation line is arguably by referring to a government's own perception of what it aims its IP, IS, or DIP and CP to be, alongside the underlying conceptual framework, purportedly informing this perception. This is usually hard to decipher, as it depends on the degree of sophistication, desired involvement, and clarity of the proposed measures. In cases such as the EU, it also depends on the degree of alignment between EU-wide and national IPs. While, for example, EU-wide IPs are rather sophisticated, as explained below, it is not always clear that national governments follow these, or are even aware of their existence. For example, this author has met on numerous occasions policy-makers responsible for IP in their respective countries, who are very surprised to 'find out' that a EU-wide IP is in place. This poses a special challenge.

In mainstream 'neoclassical' economics, the government's objective is assumed to be the improvement of the welfare of its citizens, which is achieved when scarce resources are allocated efficiently. Classical and post-Keynesian economists instead paid attention to the objective of wealth creation. In their view, efficient resource allocation can lead to wealth creation, but this is neither a necessary nor a sufficient condition. For example, wealth creation can also be achieved by different means, such as innovation and market creation (Kaldor, 1970)—aspects downplayed by the neoclassical school.⁶ On the other hand, a country can manage to allocate its scarce resources efficiently, but fail to create new resources through innovation at the same pace as another country, which is not as good in resource allocation, but fares better in resource-wealth creation. Manufacturing is widely believed to be an important contributor to wealth creation, for reasons such as the high degree of tradability of its products, its positive link with technology, innovation and productivity growth, and even the close links between manufacturing and services (Kaldor, 1972; Amsden, 2008). For example, in the case of the British manufacturer Rolls Royce, over 50% of its revenues are now accounted for by their servicing of aircraft engines, while engines themselves are sold at near cost, to create lock-in and quasicaptive service recipient-customers. Important in such cases is that servicing requires manufacturing skills, knowledge, and capabilities to start with—this renders the two inseparable in a fundamental, even definitional, manner, hence the emergence of terms such as 'manu-services'.

The dominant perspective on IP and CP among economists arguably remains the neoclassical industrial organisation (IO)-based one. In its context, competition is seen as a type of industry structure, which can be perfect (or contestable, Baumol, 1982) or imperfect. 'Perfection' and 'contestability' are defined in terms of price-taking behaviour; hence zero excess profits (Augier & Teece, 2009). According to this view, monopolistic restrictions lead to a misallocation of resources, through structural market failures and engender 'welfare losses' due to monopoly, which need to be removed through CP. This focus on resource misallocation and static 'welfare losses' fails to account for differences in efficiency, such as resources and capabilities, between firms. Such differences can involve differential innovations, ability to reduce transaction costs, and dynamic capabilities (Teece, 2007). In reality, it is recognised that it is unlikely that markets will be perfectly competitive or contestable (Dixit, 1982). Moreover, the assumption that technology, innovation, and capabilities are constant or simply linked to the type of market structure (Scherer & Ross, 1990) is a major limitation that has been well rehearsed in literature and will not detain us further here (see Pitelis, 1991; Jorde & Teece, 1992).

The dominance of the neoclassical view on CP and IP is currently under question, in part as a result of the emergence and popularity of the evolutionary, resource, capabilities, knowledge, and system-based views, which we have already mentioned in the previous section. This encompasses the diverse group of contributions we discussed,

⁶ For alternative theories of the state, see Pitelis (1994) and North et al. (2006).

⁷ See 'Forging ahead' in *The Economist*, 21 April 2012. See also McFadden (2012).

all of which share the view that competition should not be seen as a type of market structure, but rather as a process of rivalry sometimes combined with collusive behaviour (Cowling, 1982) and often characterised by 'creative destruction' (Schumpeter, 1942). Moreover, proponents of this perspective share the view that the classical focus on value and wealth creation, realisation, and distribution are important objectives of economics and that these cannot be achieved merely through efficiency in resource allocation (Pitelis, 2009b). There is also a widespread belief that firms are important contributors to value and wealth creation, that each firm is an individual entity, which differs from other firms in terms of its distinct resources, capabilities, knowledge, and learning potential, and that big-business competition can help foster value and wealth creation (Cimoli et al., 2009).

As noted, the lineage of this perspective includes the classical and post-Keynesian economists, as well as scholars such as Joseph Schumpeter (1942), and more recently Penrose (1959), Richardson(1972), and Nelson & Winter(1982). Its focus on knowledge and innovation, institutions and evolutionary change, as well as its 'systemic' (as opposed to just market failure), are arguably fashioning a major shift in CP and IP in some policy circles, notably the European (Nubler, 2011)—our focus in the next subsection, and also the OECD (Warwick, 2013) and recently Britain (Foresight, 2013).

Implications of the evolutionary, resource and system-based perspective for CP and IP include the need for a broader welfare criterion than maximisation of consumer surplus (Mahoney et al., 2009) and that superior capabilities can provide another efficiency-based reason for industrial concentration/consolidation and large firm size. In addition, viewing competition as a dynamic process of creative (or less creative) destruction through innovation implies the need to account for the determinants of innovation, when considering the effects of 'monopoly'. Last, but not least, competition with cooperation (or 'co-opetition'), as in Richardson (1972), implies the need to account for the potential productivity benefits of co-opetition when devising anti-trust policy (Jorde & Teece, 1992).

While engaging more with the neoclassical perspective, and without much recognition of the literature summarised above, more recent work by more eclectic scholars such as Rodrik (2009), Hausmann et al. (2011) and Aghion et al. (2011) also emphasise the need for IP, when there exist information asymmetries, missing inputs, and coordination failures—virtually always! In this context, Stiglitz (2011) pointed to a need to promote learning across the board, thereby creating a learning-based economy. This supports earlier ideas by Cambridge school scholars, such as Luigi Pasinetti (see Pasinetti, 2009; Pitelis, 2012c). More recently, Warwick (2013) proposed moving beyond earlier approaches to IP towards one that aims to help build systems, networks, and institutions, as well as to align strategic priorities. All these point to an emerging consensus that DIPs matter much more than originally acknowledged by neoclassical theory. As the conservative British PM David Cameron has put it, government is involved with industry anyway, so we better focus on how to improve this involvement (Pitelis, 2011), rather than keep debating its existence. Foresight

(2013) moves in this direction. In recent years, moreover, European policy-makers have also recognised the importance of a DIP. We examine this below.

II.c The Case of European IP

The neoclassical economic perspective has helped shape CP and IP thinking in Europe for many decades. The original Articles 85 and 86 of the Treaty of Rome on the acquisition and abuse of monopoly power are apparently informed by the IO perspective on the welfare losses of monopoly, in that they express concern with the impact on consumer prices of concentrated market structures. However, European practice has diverged from theory. A notable example is the 'national champions' or 'picking winners' policy, which was pursued by various European countries in the 1960s and 1970s. Much like in the case of Japan, this involved identifying potentially successful sectors and firms and employing measures such as subsidies and tax breaks to promote them. It also involved an encouraging attitude towards mergers, as well as the nationalisation of utilities and other industries perceived to be 'strategic'. For example, the post-World War II French experience resembled Japan, in that it involved a close relationship between government and business and a readiness to nationalise certain enterprises, in order to foster national champions in oligopolistic, technology and capital intensive industries (Friendson, 1997). In Italy and Spain too, government assistance was common (Chandler et al., 1997). In Germany, large enterprises received support from the German banks, in what became known as 'Rhenish Capitalism' (Wengenroth, 1997). Similar was the case of Britain (Pitelis, 1994; Pitelis & Kelmendi, 2009), and indeed, with its own specific characteristics, that of the USA (Best, 1990). Evidently, all these were inconsistent with the pursuit of 'perfect competition'.

The 'national champions' policy was also pursued at Europe level, in the search for European companies, which could outcompete large American multinationals (Bianchi & Labory, 2006). In some cases, such policies blunted incentives for protected firms to innovate, and gave rise to 'problematic enterprises', or as British PM Margaret Thatcher called them 'lame ducks'. On the other hand, certain sectors and companies, like commercial aircraft (e.g. Airbus) and cars, have evidently benefited from such IPs. Nevertheless, in the 1980s, European governments, led by Mrs Thatcher, resorted to deregulation and privatisation, as well as a shift of focus to SMEs and entrepreneurship, in an avowed attempt to roll back the state, with rather mixed results (Clarke & Pitelis, 1994). European policy at the time chose to emphasise so-called 'horizontal measures', such as education, innovation, improved infrastructure, and public sector efficiency, without targeting particular firms or sectors (Pitelis, 2007).

As noted, the rise of the BRICs and 'State Capitalism', 8 alongside the more recent predicament of the European economy (Pitelis, 2012a), has led to the return of the IP

⁸ See *The Economist* Special Issue on 'The rise of State Capitalism', 21 January 2012.

and the 'manufacturing matters' debate in Europe. Several European Commission (EC) documents, released since 2002, are noteworthy in this regard. All of them employ explicitly the term IP and have a manufacturing focus. This in itself is significant.

Focusing on the main post-2000 documents, EC (2002) was an important landmark, in that it departed from the earlier focus on 'horizontal measures' and the rather arm's length approach to the industry versus services debate. More specifically, the major themes in EC (2002) were that industry does matter; horizontal policy measures need to be applied in response to specific sectoral needs; and that policy needs to contribute to competitiveness. In addition, the document suggested that enlargement is seen as an opportunity and that (environmental) sustainability is key. Building on this, the objective of the EC (2004) document was for IP to accompany the process of industrial change-deindustrialisation, with proposed 'actions' that included a 'regulation framework', 'synergies of policies', and a 'sectoral dimension'.

More recently, the EC (2010a) communication proposed an integrated IP for the globalisation era that aims to put competitiveness and sustainability centre stage. EC (2011), aptly entitled 'industrial policy: reinforcing competitiveness', placed emphasis on industrial change, innovative industry, a business-friendly environment for industry and services, and support for SMEs, and environmental sustainability. The closely related EC (2010b), 'new growth strategy' emphasised the need for a smart, inclusive and sustainable growth that relies on 'open coordination' and leveraging local knowledge, but also the benefits from central coordination. More recent talk and EC conferences refer explicitly to re-industrialisation with an eye to a more balanced diversified European economy.

The importance of a systemic view, industry, the reversing of 'deindustrialisation', international 'competitiveness', the 'sectoral dimension', synergies of policies, regulation, environmental and energy sustainability, and the challenges of globalisation in the intangible assets-based economy are widely acknowledged without the neoclassical camp; see Edquist (2005) and Lundvall (2007). In the above context, the EU-advocated policies in the new millennium are more in line than before with the evolutionary/resource/system-based view and, in the view of this author, represent a move in the right direction. It is unfortunate that the recent crisis threatens to undermine this by fostering protectionism and introversion (WTO, 2012). Having said this, there is scope for European IP to pay more attention to business strategy-informed actions that foster the sustainable appropriation/capture of value and wealth, as opposed to the creation of value through efficiency, as well as to the issue of system-wide economic sustainability. The next section proposes a strategy for European sustainable reindustrialisation and competitiveness that builds on our earlier discussion and aims to address these limitations, paying particular attention to the requisite conditions for fostering system-wide economic sustainability.

III. TOWARDS A BUSINESS-POLICY-INFORMED STRATEGY FOR EUROPEAN REINDUSTRIALISATION AND SUSTAINABLE COMPETITIVENESS

As already noted, both neoclassical, post-Keynesian and system-based evolutionary economics paid almost exclusive emphasis on value creation, failed to adequately discuss the issues of value creation and capture, and hence ignored the interrelationship between the two and how this impacts on the system-wide economic sustainability. In order to embed our proposed strategy for sustainable international competitiveness within a coherent alternative framework, we propose below first a synthesis that brings together elements from both the neoclassical and classical views. We then propose a business-strategy-informed DIP, that challenges some commonly perceived as contradictions in extant debates on DIPs and pays attention to sustainable system-wide value co-creation and value capture.

III.a The Nature and Determinants of Value and Wealth Creation: A Meta-Classical Synthesis

The nature and determinants of 'value' and wealth creation, realisation, and distribution were at the heart of classical economic thinking, in the likes of Smith (1776), Ricardo (1817), and Marx (1959). Dobb (1973) and Robinson (1962) provided critical accounts and made important contributions of their own. Dobb, for example, has observed that both major theories of value, the classical 'labour theory' and the neoclassical marginal utility-based one, can help co-determine value creation. Joan Robinson famously called all value theories 'meta-physical', more articles of faith than the result of rigorous scientific investigation. Nowadays, it is indeed more conventional to talk in terms of value-added than value in general, and wealth creation, rather than value creation. Yet, we believe that a quick excursion on the nature and theories, as well as determinants, of value is not without its own value, not least because value added already includes the word 'value' to start with.

From the point of view of the individual economic agent, 'value' can be defined as perceived worthiness of a product or service to the (potential and/or target) beneficiary. This is usually socially co-perceived and co-created (Pitelis, 2009a). Value added is the additional value conferred to a product or service by an economic agent, such as an individual, a firm, a sector, or a nation. It remains only potential until the moment when users have been convinced and/or are able to pay a market price to purchase the product or service, and it is realised once the product or service is purchased. Value added may never be realised, if consumers lack the power to purchase the product or service (effective demand). Moreover, an economic agent, such as a firm, may fail to appropriate/capture a significant share of aggregate realised value, if outcompeted by rivals who possess substitute products and/or superior advantages, such as complementary assets and capabilities; see Teece (1986). This renders important the discussion of value realisation and value appropriation/capture.

In general, value added is engendered through increased efficiency and/or productivity, including efficiency in resource allocation; hence, a reduction in the cost of production and/or an increase in the perceived utility-worthiness of the product or service through 'differentiation'. This can be due to increased functionality and/or aesthetic appeal or to 'imaginary' factors, achieved, for example, through advertising. There are long debates on these issues in IO and business strategy (see Tirole, 1988; Grant, 2005; Cowling, 2006); often, real and imaginary elements coexist, and it is arguable that through innovation, cost reductions and product differentiation can take place simultaneously. Apple products are a case in point, in that they are cheaply produced in China but attract high margins as a result of aesthetic appeal but also sophisticated value capture strategies. Steve Jobs famously stated in *The Lost Interview* that from his early days with Apple his problem was to deal with Marx's problem of the 'realisation of value'!

Drawing on the extant theory of economics and management, it can be argued that four major factors interact to explain value-added at firm level: firm strategy and infrastructure; unit cost economies/increasing returns to scale (e.g. Young, 1928; Kaldor, 1970), specialised resources (notably human) and their capabilities (e.g. Penrose, 1959; Teece, 2007), and technology and innovativeness (e.g. Schumpeter, 1942). An attractive property of these four factors is that they are scalable to the mesoeconomic (region, industry, sector), and macroeconomic levels when appropriately defined, hence allowing a relatively smooth aggregation, based on firm-level foundations (Pitelis, 1998, 2009a). For example, one can talk in terms of the sectoral, regional, and nation-wide strategy and structure, unit costs economies, system of innovation, and human resources and capabilities. This scaling up property is missing from other works, including that of Porter, whose business-level strategy focused on reductions in the forces of competition and 'positioning' (Porter, 1985), with no apparent link to his subsequent 'Diamond' framework (Pitelis & Vasilaros, 2010). On the other hand, however, we claim below that ideas from strategy, including those of Porter can be of import to the DIP debate.

The determinants of value added impact mostly on potential value, not realised-captured value, with the exception of business strategies for profitability/value capture. In business economics and strategy, there are extensive discussions on strategies for value realisation/capture. These include integration (horizontal and vertical), diversification, and cooperation strategies; 'generic strategies'; entry deterrence strategies (through strategic or technological-'innocent' barriers to entry); and 'firm-level differentiation/heterogeneity/branding' strategies (Pitelis, 2009a).

It is arguable that strategies for value realisation and capture are scalable to the mesoand nation-wide levels too. For example, countries can use strategic trade/protectionist policies. They may adopt regional/national differentiation-branding strategies by strengthening, and/or engendering and promoting their comparative advantages. In some cases, de-integration strategies are adopted (for example, the integration of Germany or the de-integration of countries from the former Soviet Union and elsewhere). Co-operation strategies, often in the context of regional associations of countries, such as the EU,

NAFTA or ASEAN, are common. Generic strategies are also of relevance to nations, which may aim, or happen to be, cost leaders (e.g. China in manufacturing, India in IT services), differentiators (e.g. French and Italian design), or niche players, for example, Switzerland in banking and/or watches. More complex cases can involve elements of niche (cost leadership and/or product differentiation), in specific activities, as for example recently Britain in luxury cars. In addition, such strategies can be partly historically determined, partly the result of policy initiatives, partly exogenous, or usually a combination of all these and more, including serendipity. Shapiro & Taylor (1990), Freeman (1995), Fagerberg et al. (2005), and Chang & Lin (2009) provide more extensive discussion and examples.

III.b A Strategy for European Reindustrialisation and Sustainable Competitiveness

In our definition, superior international competitiveness equates to the ability to capture co-created value sustainably. This definition involves the words 'creation' and 'co-creation' of value, capture of value and 'sustainability'. As we noted, extant literature has paid attention mostly to value creation. Hence, our focus here will be on value co-creation, value capture, and sustainability.

With regard to value creation first, the European focus in the 1990s was on so-called 'horizontal measures'. These are measures that cover the economy as a whole and relate to the four determinants of value creation we discussed. For example, training and education improve human resources; tax breaks for R&D and intellectual property right protection can foster innovation, physical infrastructure (roads, transport, telecommunications), and a supporting legal and institutional as well as cultural context, a more efficient and effective public sector, can help all business to 'do business'. Anti-trust/CPs can foster big-business competition and non-collusive co-operation that leverages increasing returns to scale and fosters innovation.

In the above context, even horizontal measures alone can afford a huge space for the public sector. When done effectively they help co-create value with the private sector. This is not merely because of 'market failure' but also because of a division of labour based on differential resources, skills and capabilities. The private sector does not normally run a police and army service, they do not have the legitimacy to legislate and tax. Calling 'legitimacy' and 'democracy' for that matter, an outcome of 'market failure' would be rather far-fetched. Hence we submit that both market (and government) failures, and differential capabilities can help explain the division of labour and value co-creation between the two (Klein et al., 2013).

Many of the aforementioned functions of the state are recognised as legitimate by free market champions such as Hayek (1944) who added the delineation and protection of rights, defence against foreign armies and even anti-trust policies based on the notion of 'planning for competition'. A critical question is whether DIPs can go further than that, in a way that it is likely to enhance the capture of co-created value in a sustainable way, whereby the satisfaction of an objective in the short run, does not prejudice the achievement of the same objective in the longer run. This presupposes

economic sustainability, which at its most basic level is the avoidance of destructive economic crises (Pitelis, 2013).

In order to do this, we first try to go beyond the two apparently contradictory principles of DIPs, namely market failure versus market guidance and CA-based versus CA-defying ones. We then revisit the manufacturing/services dichotomy and the horizontal versus vertical policies ones. We claim that they all involve false contradictions and that an integrated view on these apparent dilemmas can afford the basis for a theory-founded, minimally invasive, DIP that go beyond Hayek's approved scope for public policy. On this basis, we then draw on business strategy in order to propose four specific ingredients of such a DIP that are in line with our proposed synthesis and foster sustainable international competitiveness.

The first apparent 'contradiction' is the market failure versus market guidance one. We propose that this contradiction is false and that 'market-guided market guidance' is likely to be a better basis for public policy. That would involve taking into account-'reading' market signals and help build on them whenever desirable. Moreover, when markets are absent market creation and co-creation, in a market-guided way, can be a legitimate function of public policy and public-private-polity-based partnerships (PPPPs) (Pitelis, 2013).

The second false 'contradiction' is the comparative versus competitive advantages one. This is because the very process of economic development definitionally involves the upgrading and/or development of new comparative advantages. So while at any given point in time countries can be said to trade based on their CAs, over time their CAs shift, for various reasons, including chance, design or serendipity. In this context, the more relevant question is whether the evolution of CAs should be CA-friendly or CA-defying. Since development involves the eventual defying of CAs, by definition, it is arguable that the best way to defy one's CAs is in a CA-friendly way. This way, one builds on extant strength. Of course this will not always be possible or desirable. In cases such as the emergence of mobile banking in Kenya, the CA was not there—if anything, it was the lack of a CA that triggered a radically new business model that changed fundamentally the face of banking in that country and more widely. Accordingly while our proposed 'CA-friendly CA defiance' is likely to be advisable at most times, pure CA defiance can both work and be best in certain cases.

Concerning the focus of DIP on manufacturing versus services, we have already claimed that manufacturing-based services (and sometimes the opposite) are likely to lead to more sustainable advantages, in that they are harder to imitate. This calls for economic diversification based on strength and manufacturing—services bridging business model innovations.

Concerning specific policies, we submit that the horizontal/vertical policies contradiction is also a false one. In most countries (especially in smaller ones), there is a limited number of sectors that exhibit CAs. Any horizontal measure helps these disproportionally; hence, it involves a vertical dimension; we can call these 'horizontical'. In this context, some outright vertical policies may well help level the playing field, hence be more horizontally friendly than the horizontal ones. This is in line with the

recognition by the EU that horizontal policies should target particular sectors, but goes further in recognising that extant non-vertically oriented policies may well have undesirable vertical dimensions that need to be considered.

Two more apparent contradictions are relevant to our discussion: first, the global/local contradiction, and second, the competition—cooperation ones. Concerning the former, this is false today in that local advantages help foster global success while with increasing globalisation the leveraging of globally based advantages and opportunities is often a prerequisite for local presence and even survival. Hence the issue becomes the identification of the 'optimal mix' between global and local, or glocal (Pitelis & Teece, 2010).

The next apparent contradiction is that of competition and cooperation, both between firms (and nations) and between the public and the private within or between nations. Here again, involved to varying degrees is co-opetition. In particular, the public and the private sectors within an economy can both be arm's length, and even compete (e.g. for the part of profit that goes to taxation), as well as cooperate, for example in the promotion of exports. In this context, the issue becomes the identification of the scope for co-opetitive policies that leverage the comparative advantages towards the achievement of a mutually satisfying objective.

With the above in mind, we claim below that four proposed ingredients of a business-strategy-informed DIP can foster sustainable international competitiveness, in a way that goes beyond Hayek's proposed legitimate scope for state intervention, while respecting our proposed solutions to the apparent contradictions above. These are the following. First, the identification of extant and potential comparative advantages; secondly, the adoption of a 'positioning strategy'; thirdly, the use of 'vehicles', such as regional or innovation clusters, and/with appropriate inward FDI; fourthly, the identification and development of 'bottleneck' assets and capabilities in the context of specialisation within global and local value chains. Besides involving collaboration between the public and private sectors, the need for sustainability of these measures affords a critical role for the 'polity' (the so-called third sector), such as NGOs, consumer associations, public-private partnerships, clusters, business ecosystems, and overall 'social capital' (Putnam, 1993; Moran & Ghoshal, 1999; Branston et al., 2006). We develop these ideas below.

Much like private firms, regions and countries need to diagnose their evolving comparative advantages, and decide on whether they wish to 'compete' on their basis or to try to develop new advantages, in activities, where they perceive future returns are likely to be more lucrative and/or sustainable. The latter can be defined as constructed, or 'competitive advantages'. Differently put, countries, too, may wish to diagnose what Penrose (1959) called 'productive opportunity'—the dynamic interaction between their internal resources and competencies, and the external opportunities and threats. Sometimes, potential future advantages are latent and hard to identify, in some cases they exist only in the minds of some entrepreneur, or even bureaucrat. Take for example, the case of Mr. Toyoda (the founder of the Toyota company), who diversified from textiles to cars, despite the lack of any obvious link between the two, thereby laying the foundations of the Japanese miracle. The desired mix of

comparative and competitive advantages for each country requires in-depth investigation, and cannot be decided on a priori grounds and without analysis on the ground. Our argument is that this process of CA defiance should be as much as possible CA friendly, while the resultant market guidance, should be market guided. It can often involve market creation and co-creation. The informational and capability requirements for the private sector alone (especially the smaller firms) can be far too high for it to deal with this without government collaboration, and hence, the CA-friendly defiance of extant CAs through market-guided market guidance and co-creation is a legitimate function of government and indeed of polity (the 'third sector'), given its local knowledge on the ground.

Once the comparative or the competitive advantages have been diagnosed, selected and (in the case of competitive ones) co-constructed, another decision can involve the country's 'positioning' (Pitelis, 2009b). Countries, like firms, could aim to position themselves along a relative to other countries cost-relative differentiation ('image') spectrum. These can be high or low. The best position to be in is low-relative cost/high-relative differentiation-'image'. This is normally the case of countries with a high-innovation culture and performance—with strong 'systems of innovation', so to speak. This allows them to simultaneously reduce costs (through organisational and institutional innovation), and produce products, services, and an 'image' (country differentiation-branding) of a leader, an innovator, and a 'quality' player. Small Scandinavian European players such as Sweden and Denmark are cases in point; see Freeman (1995), Fagerberg et al. (2005).

Countries with high-relative costs and low-differentiation produce expensive goods and services, and the image of the country is of low quality. High-relative costs can be due to low-innovative capability, poor infrastructure, lack of increasing returns, and/or a weak organisational and institutional configuration. Greece in the 1990s is such an example. Although the country was apparently 'competitive' in terms of growth rates of GDP well in excess of other European countries, that competitiveness was not built on supply side foundations, and was not sustainable (Pitelis, 2012b).

Countries with high costs and high differentiation are likely to be developed, with high technical and operational competencies, but without a strong innovation system. They can have relatively high-labour costs, as a result of distributional and welfare policies. The lack of innovative capabilities can be an outcome of organisational and institutional sclerosis, and path dependence—doing already proven things in proven ways. The lack of curiosity and innovation could result in a 'stuck in the middle'/question—mark position. It is likely to characterise developed economies that have relinquished their incentive and capability to innovate. Germany in the 1990s was a case in point.⁹

Low-relative cost—low-relative differentiation countries are also 'stuck in the middle', but are likely to be at an earlier stage of their development—perhaps these are transition or emerging economies. Here, unit costs can be low because of very cheap

⁹ See interview of G. Schröder by R. Zhong in *The Wall Street Journal*, published on 9 July 2012, titled 'The man who rescued the German economy'.

labour and resource costs, but there is also a lack of differentiation/comparative or competitive advantages, that places them in that category. Eastern European transition economies are cases in point (Cowling & Tomlinson, 2011).

The relative costs/differentiation framework can help countries identify ways to improve their competitiveness by reducing unit costs, improving differentiation, and strengthening their innovation capabilities. A small country, for instance, with good climate, low costs of labour and limited manufacturing capabilities, can aim to achieve high-country differentiation (for instance, in specialised, quality tourism), with good service (which need not require much higher costs, if brought about through culture and education), and low costs. Countries with human resources that possess ample time to spare due to lack of employment opportunities, could aim to achieve differentiation through emphasising service provision, e.g. call centres, IT services, etc. These are 'niche-differentiation' strategies, more appropriate for countries which cannot pursue an across-the-board differentiation strategy (Shapiro & Taylor, 1990).

The idea of positioning is due to Porter (1985). When applied to the case of nations, positioning involves naturally market-guided market guidance, CA-friendly CA-defiance and PPPP-based co-opetition, not least because the informational, capability, and incentive-related requirements for the market or private sector alone to achieve, or even aim for, this, is simply not there. Simply put, nation-wide positioning requires institutional and regulatory structures that are without the brief of markets and/or firms but are within the brief of the public, sometimes the polity, and hence of PPPP-based DIPs.

A third ingredient of a business strategy-informed IS involves 'vehicles' through which supply side structural international competitiveness can be improved. By 'vehicles' we refer mainly to the inward FDI, and agglomerations of firms and related organisations such as clusters, business ecosystems, and special economic zones (EZs). Independently and when pursued together, these can foster productivity and competitiveness (Porter, 1990; Pitelis, 2009a). The sustainability of such competitiveness requires embeddedness. This means that countries should aim to create linkages between a local production base, and FDI, so that FDI does not 'fly' when conditions change, e.g. costs increase.

Besides positioning and branding, it is important for business, regions and nations, to specialise within emergent global value chains-production systems, and/or create (segments of) their own locally based ones to the extent possible, in a way that places them in the position of 'bottleneck' players/assets (those whose contribution to the final product is most critical), so that they can capture the biggest part possible of the globally co-created pie (UNCTAD, 2012). For example, despite her recent success in luxury cars, Britain still only captures a small part of the value added, as a result of 'bottleneck' inputs, which she buys in. ¹⁰ Identifying this challenge and helping to address it by bringing into the country the production of such parts, can be one

¹⁰ John Leech, in *The Economist*, published on 17 November 2012, 'The motor industry: taking the high-road'.

solution. Once again the institutional, regulatory, incentive, and resource-capability bases of the market and (even very big) firms are not normally available, and/or within their remit; hence public policy and PPPPs of the type we advocated here can be of help.

The four ingredients should be considered simultaneously. Competitive advantages could be linked to the positioning, clusters, and business ecosystems should be diagnosed and upgraded and FDI attracted, in a way that is in line with advantages and supports the pursued positioning. Bottleneck assets and capabilities should be identified and leveraged in the context of specialisation within advantages-compatible segments of global value chains. What is advantages-compatible, is often beyond the capabilities and resources, even the radar, of many firms, especially SMEs. The public sector can therefore be critical in funding the requisite research and disseminating the information and knowledge to whoever can benefit from it. It can act as a 'public entrepreneur' (Klein et al., 2010, 2013).

Concerning adaptation, advantages, and positioning should be reviewed regularly to ensure consistency with evolving circumstances/stages of development. For example, in order to attract high-knowledge-intensive FDI, it may be useful to discourage some FDI, e.g. by rendering such FDI expensive to firms, through a high-wage policy—as pursued by Singapore (Pitelis, 1994; Lall, 2000). Care should be taken to achieve a coincidence between what multinational enterprises (MNEs), require in their quest to leverage locational advantages, and what the country considers consistent with its advantages/positioning strategy. Such policies may become important, in an era of 'fragmentation' (Venables, 1999), where MNEs can slice the value-chain and choose 'optimal' locations for each part of their production process. SMEs can, in this context, aim to specialise in 'bottleneck' parts, which are outside the radar or interest of the 'giants', but of importance to their own objectives. Germany's 'Mittelstand' (its highly specialised advanced manufacturing SMEs), and more recently Britain's aptly named 'Middlandstand', are cases in point. Such moves often require public-private collaboration, hence DIPs, at the very least through the provision of intelligence and advice by the government. This is now recognised widely, even enthusiastically embraced. The Economist (21 September 2013) recently cites the case of the 'High-Value Manufacturing Catapult' outside Coventry as a case of public-private-polity (University, in this case) collaboration, championed by the coalition government in the UK, alongside a series of other interventionist measures, see also Foresight (2013).

In the above context our question is, how does Europe fare, and what can be done to foster European sustainable international competitiveness? As noted in Section III, theoretically, European IP seems to be moving in the right direction. The 2010 and 2011 communications recognise the need for Europe to improve her system-wide

¹¹ The requisite conditions for achieving these are not easy and are arguably becoming more stringent for developing countries (Boltho and Allsopp, 1987; Stiglitz, 2001; Fagerberg and Verspagen, 2002; Nolan et al., 2008). At the same time, specialisation in segments of global value chains can provide some scope for smart, agile and effective DIPs (UNCTAD, 2012).

productivity and competitiveness, reverse de-industrialisation and promote green technologies. They acknowledge the need to coordinate policies at EU level, between EU nations (the 'open coordination method'). This involves information exchange for the identification and adoption of good practice (Bianchi & Labory, 2011). The June 2010 communication by the EC that proposes the growth strategy to 2020, moreover, states that 'Europe can succeed, if it acts collectively, as a Union' (EC, 2010a, p. 3).

On the other hand, when looking at the European political elites' brinkmanship vis-á-vis Greece (G) and the PIIS (Portugal, Italy, Ireland, and Spain), one might be tempted to believe that profligate PIIGS is Europe's only current concern (Pitelis, 2012b). That the 'Lisbon strategy', which aimed to turn Europe as a whole into the world's most knowledge-intensive economy by 2010, has by now become an embarrassment seems conveniently forgotten. It is unclear, how Europe's 'new growth strategy' for years 2010–2020, that replaced the Lisbon strategy, and is meant to be 'smart', 'sustainable', 'inclusive', based on knowledge and innovation, while preserving the environment and ensuring social cohesion (EC, 2010a), tallies with the current austerity measures imposed on the PIIGS. Forgotten is also the fact that the European project was as much political, as it was economic. It involved international collaborations for peace and a social democratic model that could deliver the goods to its citizens in an inclusive, fair way. A focus on economic competitiveness alone endangers this.

In line with our analysis so far, a business-strategy-informed European IS for sustainable rejuvenation and international competitiveness should leverage Europe's capabilities to create and co-create global value, and to capture as high a share of this as possible. This can be achieved through the adoption of the four ingredients discussed above. Capturing co-created value in a sustainable way, through the co-creation of sustainable clusters and business ecosystems, and the adoption of requisite positioning and specialisation in global and local value chains strategies can be seen as a new rationale for DIPs-IS. In this context, Europe could aim to position herself as a 'region' characterised by 'value for money' products and services ('relatively high quality' -'relatively low costs'), that specialises in bottleneck assets, such as advanced manufacturing products and services. At the moment, with the exception of Germany, and to a lesser extent Britain, Europe as a whole seems to be 'stuck in the middle'. Europe needs to pursue a strategy for rejuvenation for the bloc as a whole, not just its core or more advanced players. This requires genuine developmental support to the less favoured regions, not just bailouts (Pitelis, 2012a). It also poses additional challenges, discussed below. Moreover, while it is arguable that increases in labour costs, alongside investments by BRICs in the manufacturing sector of the old industrial countries (as for example, the car industry in Britain), can assist Europe's re-industrialisation efforts (see McFadden, 2012), such trends can be leveraged more effectively, if embedded within a wider, well thought-out and coherent strategy.

As noted, a rejuvenation strategy requires reindustrialisation and locally based manufacturing. Innovations take place in R&D labs, but mostly on the ground, by people who do things. Practice makes perfect, and this induces innovation. The loss of

production capabilities, eventually, can also mean loss of innovation capabilities (Pisano & Shih, 2009). Information and support by the state can involve possible advantage-compatible segments of global and local value chains, bottleneck assets-parts, and the targeting of diversification to new markets, such as the BRICs. A reindustrialisation strategy, additionally, requires supporting demand. This comes from consumption, investment, public deficits, and exports. In today's era of deficits, debts, and austerity, exports are the main route to sustaining demand. In this context, Europe needs to target the emerging world markets and help to co-develop them. She also needs realistic exchange rates, which in turn require political and organisational leadership.

Concerning productivity, this can increase when output goes up, or when employment goes down! Unemployment is arguably Europe's most pressing challenge, especially in the South and among the young, where 50% cent figures no longer raise eyebrows (Pitelis, 2012b). A knowledge-based economy need not generate sufficient numbers of new jobs. For example, in 2010 in the USA, Apple, Microsoft, Facebook, Cisco, Google, and Amazon created fewer jobs than the mid-size Kroger supermarkets. In the past 50 years, while labour productivity increased fourfold, the productivity of materials increased twofold, and the productivity of energy increased by only 20% (Milberg, 2012). This does not bode well with employment prospects. Jobless competitiveness, however, is Hamlet without the Prince of Denmark—it is short-term and undermines future competitiveness through the dissipation of skills and capabilities, as well as organisational knowledge and the ability to learn. Active labour market policies by the government in collaboration with intra-firm apprentices (as in Germany), can be of the essence. A cultural mindset that promotes entrepreneurship among the youth is important. This needs education, institutions, and the right culture, as well as incentive structure and enabling policies—hence DIP.

It is an important to state that our suggested DIP is not about 'picking winners'. It is about co-creating the conditions that facilitate the emergence of winners, but also their challengers, competitors, complementors, suppliers, and consumers. Policies that appropriate co-created value in a sustainable way also help to increase global value added. Appropriating as much of the co-created value, as possible, in this context, is not at the expense of other nations. These can pursue similar policies, thereby fostering further global value added. The important proviso is that value appropriation is not achieved by restraining competition, through monopolistic practices and/or protectionist policies. When this is the case, the 'game' becomes zero or even negative-sum. Sustainability, moreover, requires respecting the sources of future growth—the new generations and the environment. This calls for the mitigation of negative externalities and the promotion of positive ones, in a way that acknowledges the importance of transaction costs (Coase, 1960), but also the productivity advantages of innovative forms of societal cooperation (Ostrom, 1990).

The mitigation of negative externalities and the promotion of positive ones, in turn, poses the challenge of free riding (Olson, 1971). Sustainable value co-creation requires the minimisation of shirking, which shirking can be fostered by concentrated,

embedded power structures and relations between economic agents, such as firms, governments, and sometimes NGOs. While there is no fool proof solution to this problem, it is at least arguable that diversity and pluralism can foster mutual monitoring and help mitigate it, at least in part. In this context, Europe should aim to leverage the comparative advantages of the private and the public sectors, as well as the 'polity'. The public sector, for example, can be best for the provision of 'general purpose technologies', 'public goods' and legitimacy, the creation of laws, institutions and regulation. Private entrepreneurs can be best in commercialisation and value capture. The 'polity' can help provide 'social capital' and cohesion, and promote sustainability (Pitelis, 2013).

Implementing our proposed strategy requires requisite infrastructure, institutions and authorities, governance structures, attitudes, values, ideology, and culture (North, 1981). This is a challenge in general, and for Europe in particular. Implementing any strategy requires coordination. As in business, the overall vision and culture, as well as resource and contingency planning, is set at the top. Unlike small and relatively authoritarian states, Europe involves many nations and lacks a central co-ordinating authority. It is partly for this reason that the relatively sophisticated communications by the EC are often ignored, even unbeknown to some member states (as the author's own experience as a policy-maker and President of a public sector organisation of a EU country testifies). This requires steps to disseminate the strategy and the provision of incentives to adapt it to local conditions and support with implementation capabilities. It also requires an allowance for 'policy space' for member states to experiment, while respecting the wider constraints imposed (such as state aid), or argue against these, when appropriate.

Another co-ordination challenge involves different General Directorates at the EC. An example from the author's experience involved DG16 (regional policy), promoting clusters, with DG competition claiming that clusters contravene European CP. While the idea of 'open co-ordination' is attractive and commendable, it poses implementation challenges that need to be acknowledged and addressed. Progress in this direction is likely to be slow. It may well require bold measures, such as the setting-up of an independent Europe-wide authority, responsible for devising a strategy for sustainable competitiveness and overseeing its implementation. Such an authority could coordinate and aim to integrate all European policies. It could collaborate with member states' similarly independent authorities, to adapt and implement it. To avoid an ever expanding central bureaucracy, both the Europe-wide and member state organisations could represent an evolution of existing ones and could be staffed with existing resources from related authorities. For example, already existing independent competition authorities in member states could serve this purpose.

Despite implementation and co-ordination challenges, such 'top-down/bottom-up strategies', are feasible and have been implemented elsewhere and in Europe. A case in point are the policies adopted by the German government in the early 1990s under

the leadership of Gerhard Schroder, which involved centrally co-ordinated, yet in agreement with the trade unions, restrained wage rate increases, alongside apprenticeships. These were anticipatory and proactive, and aimed to address emerging competitiveness challenges. Quite independently of their scope and possible ideological objections, they help highlight the feasibility of a DIP for sustainable European competitiveness as a whole. Current British policy is arguably a step in the right direction.

Our proposed DIP goes beyond extant approaches and can contribute to the rejuvenation of 'old Europe'. However, 'globalisation' and an emergent 'winner takes all' ideology and practice can prejudice its potential success. These have now facilitated an unprecedented income re-distribution in favour of the well-off within nations, placing pressure on demand and undermining the abilities of governments to balance their books (Atkinson & Morelli, 2011). For the first time in the history of capitalism, the top 0.01% of the population appropriates ca. 5% of global co-created value. ¹²

The emergent concentration and embeddedness of such power structures help to foster overly cosy relations between business, governments, and media that help to take challenging issues off the agenda. Dis-enfranchised groups abstain from the political arena, helping lead to parliamentary democracies that are thinly veiled oligarchies. All these have led to, and are being exacerbated by, the current crisis. The sustainability of the system is now under question. Major investors, including Warren Buffet, call for capitalism to be saved from (greedy) banks and capitalists, asking for them to be taxed, as US President Obama put it, as much as their secretaries! As Zingales (2011) observes, meritocracy and social mobility are retreating in the USA and everywhere. The coincidence of personal and corporate corruption renders the problems of many countries virtually insurmountable (Pitelis, 2012a). Neoclassical economic theory is of little, if any, help here. Ronald Coase has recently echoed Keynes' plea to save capitalism from capitalists, with a new call to save Economics from the economists (Coase, 2012)! Our proposed DIP offers little relief to such challenges. What we propose is necessary and possible, but requires no less than a revamp of the system, a re-invention and rejuvenation of 'old Europe' and of capitalism, as a whole. This is beyond our scope here, but sees Cowling & Tomlinson (2011) and Pitelis (2013), for some thoughts.

In the above context, it is also beyond the scope of this paper, and the space available, to discuss further precise policy measures. These should be based, as a minimum, on the public policies acknowledged as necessary by Hayek (whose promarket sentiments nobody ever questioned), and draw on our principles, focus, and business strategy-informed suggested actions and vehicles, based on a detailed analysis on the ground and in collaboration with those closer to the action, in the context of the overall strategic framework provided here.

¹² See, the Special report on *The Economist*, 13 October 2012, 'For richer, for poorer', by Z.M. Beddoes.

V. SUMMARY, CONCLUSIONS, AND LIMITATIONS

We suggested that a meta-classical approach to sustainable international competitiveness should marry efficient resource allocation with resource creation and involve the identification and adoption of governance structures that allow sustainable competitiveness not to be undermined by the pursuit of sectional interests and embedded power structures.

We claimed that European rejuvenation and international competitiveness could be achieved through a DIP that learns from business strategy and involves a value capture and a value co-creation aspect, usually lacking in the predominantly macroeconomic approaches. The conceptual basis behind such a DIP involves an integration of some commonly perceived 'dichotomies', notably market failure versus guidance, CA defiance versus CA-following, manufacturing versus services, horizontal versus vertical policies, competition versus cooperation, global versus local, and a top-down versus bottom-up approach. We argued for a 'top-down/bottom up' approach that involves market-guided market guidance, creation, and co-creation, CA-friendly CA defiance, with 'horizontical' measures that involve co-opetition and manu-services in the context of glocal value chains and production systems.

Within this general context, ingredients of such a DIP include the diagnosis of comparative and the co-construction of competitive advantages, the adoption of positioning strategies, the co-creation of clusters, markets, and ecosystems, the specialisation in global value chains, and the creation and specialisation in local production systems/value chains through the acquisition and adoption of bottleneck positions in such systems/chains. These can be achieved by leveraging the comparative advantages and capabilities of the public, private, and 'third' sectors (polity). It requires appropriate implementation and co-ordination mechanisms, which is a challenge in general and especially in the context of a multi-country entity, such as the EU. Setting-up an independent, Europe-wide organisation that places 'sustainable competitiveness' at the centre stage of its agenda could be one step towards addressing such challenges, but not a panacea (among others, such organisations are sometimes easier to be captured by special interests, or even engender co-capture).

Current EC communications on EU IP represent a step in the right direction, but need to be better informed by business strategy and pay more attention to the impact of power structures on policies for sustainable global value creation. European CP should aim to enhance competition through innovation by thwarting anti-competitive practices and fostering new firm creation and growth, as well as new market and ecosystem creation and co-creation. Member states (especially the more developed ones) should refrain from 'strategic trade' policies. Pluralism and diversity, through the creation and growth of the 'polity', should be encouraged, in order to engender mutual stewardship and monitoring. This, in practical terms, aims to eliminate 'regulatory capture', rent-seeking and corruption by all, especially by the more powerful constituents.

Our proposed DIP can help. Its scope for implementation and success, however, depends on wider challenges and constraints. These require a wider debate on the future of Europe and capitalism, as a whole. As conventionally put, this, however, is beyond the scope of this article.

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