

Global Production Network: The New Template of Power and Profit in the Regime of Empire

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The functional fragmentation and spatial dispersion of production in the current phase of capitalist production organisation is a result of unbundling of production due to huge decline in transportation and transmission costs. Such unbundling of production facilitated by use of steam power separated production and consumption in the early nineteenth century. It was actually a division of the world between the North and the South where the former overtook the latter in terms of growth and income. Rising divergence, increased trade and migration, exchanges on the basis of comparative advantage and expansion to reap benefits on scale economies were the dominant features of capitalist reproduction. Increased global trade however led to local concentration of production giving rise to agglomerations and industrial districts because although communication costs declined coordination costs became important over time. The advantage that the current phase of ICT revolution offers is the possibility of handling complex coordination problems from a distance. This technological change since mid-eighties together with a liberal regime adopted across the world allowed gains from huge wage difference between the North and the South. In other words, technology of the North was coupled with cheap labour of the South giving rise to a division of the world between 'head quarter' economies and 'factory' economies.¹ The crux of this re-organisation of global production taking advantage of technology and labour arbitrage emerged as a way of reducing labour turnover costs and wage costs at the same time. Global production networks led by MNCs and TNCs became the archetypal vehicle of integrating producers into global production processes.

The 2013 World Investment Report estimates that now over 80 per cent of global trade flows through global production networks led by transnational corporations.² The ILO on the other hand estimates that one in five jobs in the world are somehow linked to global value chains. The conventional North-South divide is also undergoing change. It is no longer the case that the South only produces and the North consumes, instead China, India and parts of Africa are emerging as destinations for MNCs and TNCs causing a shift in the geographical share of FDI towards developing countries. The OECD report in 2012 further indicates that between 1990 and 2010, the share of BRIICS economies in the exports of parts and components increased from 0.78 per cent to over 14 per cent. Non-OECD, non-BRIICS, Asia more than doubled their share in the same time period recording a rise from 4.6 per cent to over 9 per cent in 2010. OECD countries' share, at the same time, declines from over 92 per cent of all exports of parts and components to 70 percent by 2010.³ The share of advanced countries in global manufacturing value

¹Richard Baldwin(2012) 'Global supply chains: Why they emerged, why they matter, and where they are going'

²World investment Report (2013)

³³OECD (2012), *Global production networks and employment: a developing country perspective*

added might have declined in the past two decades, nonetheless high income countries still account for 69 per cent of manufacturing value added although accounting for only 17 per cent of manufacturing employment.⁴ The overarching argument put forward in the context of industrialisation in developing countries in the world of GPNs today is that developing nations do not require to build a deeper and wider industrial base in order to get inserted into the global scenario, rather participating in production networks and specialising on particular tasks would allow them industrialise without necessarily being competitive in producing and trading final products. Porter (1985) applied Ricardian theory of comparative advantage in the current context of fragmentation and dispersion of production arguing that countries and spaces would rather specialize on particular tasks or stages of production instead of sectors and the optimal allocation of such tasks based on a trade-off between specialisation and coordination determines the spatial distribution of production in a global value chain.⁵

Taking off from world systems theory GPN analyses in its initial phase was devoted to understanding the details of production chain that ultimately realises the dependency between core and periphery. In course of time however it went beyond offering a heuristic frame work of analysing flows from input to output and conceived this division of labour as a new feature of industrialising that could escape structural asymmetries often paraphrased as dependency.⁶ The theoretical mould of this new turning point involves analysing gains as rents captured due to creation and protection of scarce assets. The underlying proposition follows largely from Schumpeterian notion of rent and its distribution in Ricardian lines. Firms and spaces linked to global production network can upgrade their technology through innovation and improve upon governance structures of coordination and hence can increase their share in the global value added by moving up the value ladder. Wide range of empirical studies looking closely into the distribution of gains within the value chain recognises the fact that participation in global production networks in itself is not necessarily gainful for developing countries. But it largely locates the reality of asymmetry on the fact that producers of developing countries are not being able to get into high value added activities.

This paper primarily using India as a case study first of all argues that higher global integration need not give rise to higher net gain in terms of value added domestically and hence might reduce employment potential of the economy. Secondly it argues that rent arises from surplus produced in the value chain and the determination of profit in a particular stage of production is not independent of the global process of production appropriation and distribution of surplus value and therefore gains accrued as rent over and above the competitive price is also linked to determination of average rate of profit and consequent prices of production. The argument follows

⁴World Bank (2018) The trouble in the making? The Future of Manufacturing-led Development

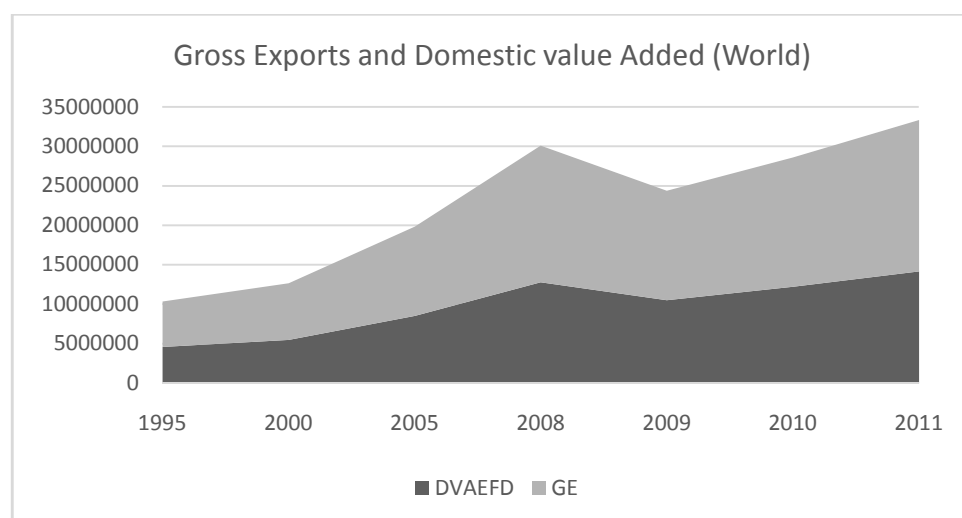
⁵M.E. Porter (1985) *Competitive advantage*, Free Press New York

⁶Jennifer Blair (2005), Global capitalism and commodity chains: looking back, going forward. *Competition & Change*, 9(2), 153–80.

from Marx's Capital, particularly the theory of general determination of the rate of profit as well as that of rent. Thirdly this paper brings to the fore that creation and protection of rents also depends on institutional structures that protect created scarcities. And the new architecture of power defined by global institutions often lead to an asymmetric distribution of potential rents by preventing access to resources prevalent in the North and dissolution of protection of those in the South. The paper finally argues that distributional conflicts within global production networks need to be located within the multiple hierarchies of capital rather than in standard notions of North-South divide and global production networks emerge as the new template articulating imperatives of *Empire*.

Emerging Trends in Production Networks: India and the World

Integration of production structures result in increased deviation of gross export figures from that of domestic value added. It is primarily because of fragmentation of production into different stages and gross trade data does not capture the actual value added by particular countries. Components can be imported and then with specific value addition can be exported to other countries, it can again be re-imported from the third country after some value being added there and then after performing the next stage of production can be exported to some fourth country. Hence there can be several phases of incoming and outgoing of goods and services which cannot be captured through figures of gross exports of a country. OECD Trade in Value Added and World Input-Output database to some extent allows us to understand the value addition that undergoes in different stages of production across national boundaries. But this decomposition does not allow us to untangle the firm level interactions within a particular country. The figure below captures the deviation of gross exports from actual domestic value added entering into foreign final demand for the world during the period 1995 to 2011. Increased integration of production structures has led to this rising deviation and this is even more prominent in case of manufacturing and industry as a whole.



Source: Author's calculation from OECD-TIVA database

The share of manufacturing and Industry as a whole in gross exports is higher than their shares in domestic value added totals. While in agriculture and allied activities, services and construction the shares in terms of domestic value added is higher compared to what it is in terms of gross value of exports. Hence, gross export figures tend to inflate manufacturing and industry's contribution to output while in cases of agriculture, services and construction export figures actually undervalue their contributions. The reason being many of these activities might have been considered as part of manufacturing value added even if they are actually not so. In case of Finance Real estate and Business Service the difference between two shares is the highest because a large part of these activities enter into output of other activities mostly manufacturing and not been accounted as independent services inputs.

The share of domestic value added in gross exports however has declined for most of the developed and developing countries during the period 1995 to 2011. It has marginally declined in the case of UK and the USA among advanced countries, the decline has been higher in cases of Japan and Germany. Interesting to note that only in the cases of China and Hong Kong the domestic value added share in gross exports has increased marginally during the reference period. The share of domestic value added in gross exports in 1995 was much higher in case of India (97.1) compared to China (66.6) but in 2011 it declined in case of India to 76 per cent whereas in case of China it marginally increased to 68 per cent. The sector wise figures suggest that in manufacturing and for industry as a whole the decline is about 23 percentage points while in case of China the share of domestic value added in manufacturing increased by 8 percentage points. Considering services in total or in various sectors we see that share of domestic value added in gross exports declined in almost all sectors both for India and China. The decline in domestic value added share in gross exports has not however affected adversely the export performance of countries. In fact, gross exports as a share of GDP has increased for all countries in the world excepting Canada. In case of India there has been a rise of about 13.2 percentage points in the share of gross exports to GDP during the period 1995 to 2011, but during the same period share of domestic value added as share of gross exports declined by 14.7 per cent.

The share of foreign value added in gross exports expectedly increased for various sectors in India for the year 2011. Real estate activities record the lowest share of foreign value added in gross exports and coke, ref. petroleum product and nuclear fuel industry records the highest share of foreign value added in gross exports. Roughly service related activities and manufacturing activities such as leather, textile and wood products show relatively low shares of foreign value added content in gross exports, less than 20 per cent. Manufacturing activities related to computer equipment, electrical equipment, transport equipment, motor vehicles, machinery, metals and chemicals industry records foreign value added content of gross exports higher than 30 per cent. It is important to note that sectors that are more integrated with the global networks are not the traditional labour intensive sectors such as leather, textiles and light manufacturing. Tasks or stages of production that are off

shored from advanced countries are labour intensive compared to their average factor intensities but in terms of developing countries average these industries are relatively capital intensive. In other words, because of cheapening of investment, industries in advanced countries are undergoing a substitution of labour by capital and at the same time they outsource relatively labour intensive activities to developing countries to reap benefits from labour arbitrage. In developing countries such as in India the capital intensity of industries increased in past two decades because of compositional change towards capital intensive industries besides rising capital intensity within sectors.

Participation rate of a country in global production network is measured by participation index computed as follows. OECD dataset gives figures of foreign value added embedded in exports which capture the backward linkage and domestic value added embedded in foreign exports measuring forward linkage of a country in production network. For a particular country adding the two and computing the share of a particular country in the aggregate of individual sums gives the participation rate index for that country. In fact, this gives a measure of how the country is integrated with the global production network. On the other hand, the ratio of domestic value added embedded in foreign exports to foreign value added embedded in a country's gross exports gives a rough measure of net gain out of participation. If the value is less than 1 then there is net loss and higher the value over 1 the higher would be the net gain. For advanced countries comprising of OECD countries, USA and UK foreign value embedded in their gross exports have declined over time and domestic value embedded in foreign exports for the group as a whole has also declined during the reference period. This perhaps suggests that for advanced countries both backward and forward linkage have shrunk over time. In cases of BRICS taken together or for India and China separately both foreign contribution to their gross exports and their contribution to foreign exports have increased over time. This trend indicates that developing countries over time have increased their participation in global production network.

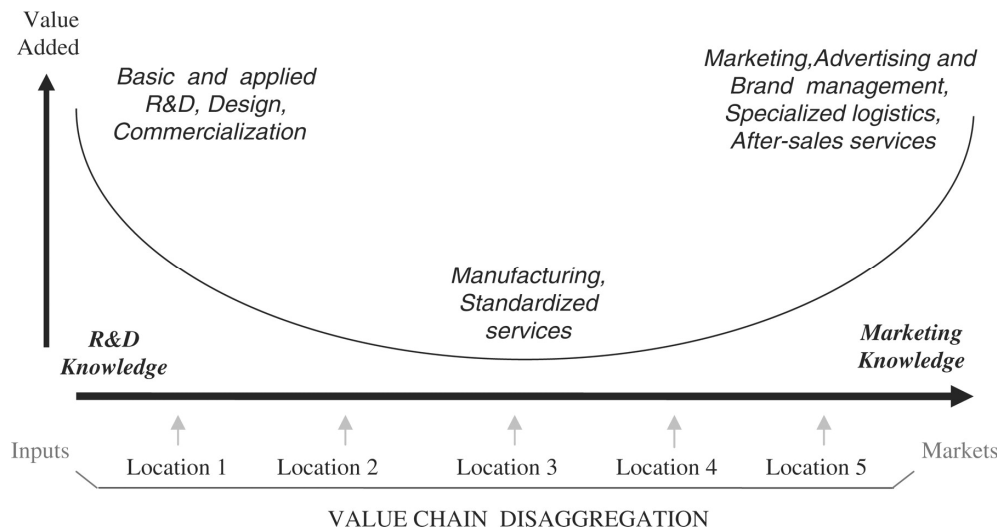
NET GAIN/LOSS RANKING					
			1-21	22-40	41-62
P A R T I C I P A T I O N	R A T E	1-20	US, Japan, UK, Russia, Saudi Arabia, Switzerland Australia	Germany, France, Italy, Spain, India	China, Korea, Chinese Taipei, Mexico
	R A T I O	21-40	Netherlands, Norway, Brazil, Indonesia, Hongkong, South Africa, Chile	Sweden, Poland, Austria, Denmark, Finland	Thailand, Ireland, Czech Republic, Turkey, Hungary, Luxemburg, Vietnam
	I N D I C E S				
	I N D I C E S				

O	41-60	Philippines, Argentina,	Israel, Greece,	Slovak,
N		Romania, Colombia, Brunei,	Lithuania,	Portugal,
		New Zealand	Croatia,	Slovenia,
			Iceland,	Estonia, Costa
			Cyprus	Rica,
				Cambodia

Source: Author's calculation from OECD-TIVA database

In the above table we map the matrix of 62 countries showing rankings in terms of participation index in the vertical axis and net gain/loss ratio of countries grouped according to their rankings in the horizontal axis. If the ranking is 1 then it shows highest participation rate or gain/loss ratio. The ranking for net gain/loss ratio is taken in terms of absolute value. Countries showing ranking above 21 have the value of the ratio less than one and hence they experience net loss. Therefore, the first column figures the countries who record net gain out of participating in global production network and the rest actually record a net loss. The top left group of countries comprises of those who rank high in terms of net gain and they are also the top 20 in terms of participation rate in the global production network. Barring Saudi Arabia which has specific resource advantage, the rest are advanced countries. The UK, USA and Japan belong to this group of top gainers. Brazil, South Africa, Philippines, Indonesia, Argentina and New Zealand are gainers among developing countries but their participation rate is relatively low. The third column comprises of mostly developing countries and transitional economies and they are the worst losers with varying degrees of participation. China falls under the top right group. China records top ranking in terms of participation rate however resulting in higher net loss. India shows net loss but its participation rate is less than that of China.

The relative decline of developing countries in terms of share in global value added is captured by a stylized curve known as the 'smile curve' largely used in empirical studies and World bank estimates related to global production network.



Source: Beng and Wei(2015)

The smile curve above suggests that higher gains are attributed to activities related to conceptualization, R&D, design and commercialisation of production mostly located in advanced countries. The other gainful activities relate to marketing, advertisement, brand management and after sales services. These activities are largely managed by the parent companies of MNCs and TNCs located in developed countries. The least share of gains account for activities related to manufacturing and standardized services that are largely undertaken by the developing South. If we compare similar smile curves over a period of time we find that over time the bottom of the smile curve has deepened implying a relative increase in difference in value share between the bottom and the top two edges of the smile curve. Therefore, the participation of developing countries has increased over time and therefore higher the participation the lower the gain in relative terms. A large number of case studies undertaken to analyze the particular pattern of value distribution in cases of Apple video iPod, Barbie doll, Nokia phone, T-shirts suggest that actual manufacturing activity accounts for the lowest share in value added.⁷

This was the backdrop of Kaplinsky (2005, 2007)⁸ reinventing the Prebisch-Singer thesis (Singer,1950; Prebisch,1950)⁹ of unequal exchange in the context of twenty-first century. The crux of the argument is that the decline of the barter terms of trade of commodities vis-a-vis manufacturing in Prebisch-Singer thesis was related to country endowments rather than attributes of commodities. The two groups of countries were differentiated in terms of their labour endowments. The labour surplus economies happen to be commodity producers while manufacturing was primarily done in labour constrained economies. In the present context the decline in the

⁷UNIDO(2013), 21st Century Manufacturing, UNIDO

⁸R. Kaplinsky, (2005). Globalization, Poverty and Inequality: Between a Rock and a Hard Place, Cambridge: Polity Press. Kaplinsky, R. (2007). Capability building in SSA: what difference do the Asian drivers make? SLPTMD Working Paper Series, 10, Department of International Development, University of Oxford.

⁹ R.Prebisch(1962). The economic development of Latin America and its principal problems, Economic Bulletin for Latin America 7(1) 1-22 N. York, United Nations. Singer, H. W. (1950). The distribution of gains between investing and borrowing countries, American Economic Review, 40(2), 473-85.

relative price of manufacturing in the past three decades has been attributed to rapid industrialisation and export from East Asia especially China. The barter terms of trade in manufactures between developing countries and the European Union suffered a decline¹⁰ (Maizels et al, 1998). 'Immiserizing growth' implying falling returns with increasing economic activity is reflected in a decline in unit price of exports specially in cases where countries rely heavily on simple assembly of imported inputs. Heintz¹¹ (2006) argues that developing countries face unequal exchange meaning engage in exports that contain more labour compared to labour congealed in imports received in exchange. Because profit rates are equalized across national boundaries owing to the mobility of capital while labour is the relatively immobile factor of production, developing countries generally import goods at prices that has to accommodate both higher wages of industrialized countries and equalized rate of profit.

Capital and the Rising North-South Gap in Value-added Share

Globalisation in the current phase is far more interpenetrative compared to what it was in the nineteenth century. The geographical dispersion of production together with functional fragmentation entails a process of integrating production structure across the globe. It gives rise to a situation of bounded rationality where transaction costs are minimized by an 'organisational fix' besides 'spatial fix' that reduces turnover cost of capital. It involves a command structure where MNCs and TNCs as lead firms define and enforce parameters under which other independent actors of the network are supposed to operate. As a result, coordination becomes important in value chains. The theoretical construct of GPN analyses according to Gereffi (1999)¹² and Kaplinsky (1998)¹³ evolves from Schumpeterian notion of rents. Chains are repositories of economic rents that emerge out of purposive creation and protection of scarce assets. Rents can be of various types. Technological rents arise from differential access to key product and process technologies. Strategic relationships with other firms can give rise to relational rents. Scarce assets can be tangible as machines or intangible as brands and some are of intermediate types such as marketing skills. Economic rents as a result emerge at different degrees in different nodes of the value chain and that determines the power relations within the chain. Because of increased competition the barriers to entry once created gradually erodes and new scarcities need to be generated either by technological or organisational innovation or through changing the rules of governance. Hence rents are dynamic and change according to deliberate actions of economic actors. Firms derive surplus over and above average rate of profit through such innovations and

¹⁰A. Maizels, et al(1998). Trends in the manufacturing terms of trade of developing countries', mimeo, Oxford, Finance and Trade Policy Centre, Queen Elizabeth House

¹¹James Heintz, (2006). Low-wage manufacturing and global commodity chains: a model in the unequal exchange tradition, Cambridge Journal of Economics, 30 (4), 507–520.

¹²G.Gereffi, (1999). International trade and industrial upgrading in the apparel commodity chain', Journal of International Economics, 48(1), 37–70.

¹³R. Kaplinsky,(1998) Globalisation, industrialisation and sustainable growth: the pursuit of the nth rent', Discussion Paper 365, Institute of Development Studies, University of Sussex.

the producer's surplus created in this process gradually get converted into consumer's surplus in the course of competition. Therefore, sustainability of certain rents depends upon a continuous process of creating productive assets those have to be protected through a process of governance and coordination. This emerging production organisation hence puts lead firms to an advantageous position who coordinate production and as a result rents are largely concentrated outside production.

GPN literature invokes two key concepts related to value chains: governance and upgradation. Gereffi (1994)¹⁴ defined governance as 'authority and power relationships that determine how financial, material, and human resources are allocated and flow within a chain'. Governance is not only the act of coordination but something more than that. It defines the rules of interaction between the lead firm and its wide network of suppliers and such formal or informal rules are to be internalized by the suppliers as mode of transactions. Gereffi et al, (2005)¹⁵ defined five governance structures categorizing network relations based on possible combinations of three independent variables namely, complexity of transactions, codifiability of information and competence of suppliers. Upgrading on the other hand refers to a process of augmenting per-unit value of products. This can be done by increasing the value of the existing product which is product upgrading; upgrading can be done by increasing the efficiency of production process as well which is termed as process upgrading. There are other modes of more sophisticated strategies of upgrading such as introducing new functions in a particular stage, moving up from simple assembling to designing which is known as functional upgrading or inter-sectoral upgrading where firms enter into new sectors. Upgrading in the GPN literature has to be understood in a relative context, it is not only about innovating but how fast a firm upgrades compared to its competitors. The key premise of GPN literature therefore are as follows: networks are the major carriers of industrialization in today's world and participation in such networks allows developing countries to industrialise and become competitive without undergoing a long drawn process of creating a deeper and wider industrial base. Secondly, because of fragmentation of production global trade takes place on the basis of Ricardian theory of comparative advantage not on the basis of specialization in producing final products but on the basis of tasks performed. Third, the gains from production network is not ensured by mere participation but it is a result of a dynamic process of continuously upgrading and improvising governance structures. In sum GPN provides a recipe of industrialization where firms and regions particularly of developing countries should participate in the complex network where optimal allocation of tasks take place as a trade-off between specialization and coordination.

¹⁴G. Gereffi, (1994). The organisation of buyer-driven global commodity chains: How US retailers shape overseas production networks. In G. Gereffi. and M. Korzeniewicz (eds), *Commodity Chains and Global Capitalism* (pp. 95–122). Westport, CT and London: Greenwood Press.

¹⁵G. Gereffi,, J. Humphrey and T. Sturgeon (2005). The governance of global value chains, *Review of International Political Economy*, 12 (1), February 78-104.

In spite of the tall claims of GPN literature indicative of a redistribution of production from the North to the South and convergence in terms of income, facts seem to be on the contrary. Undoubtedly China has emerged as the single largest country in terms of manufacturing value added but high income countries still account for the largest share in the tune of 69 per cent of manufacturing value added and 17 percent of global employment in manufacturing. Even in low-skill labour intensive tradeables 7 of the top ten exporting countries belong to the club of high income group who do not show any revealed comparative advantage on these segments.¹⁶ Furthermore, the distribution of technology remained stable over the past thirty years with very few countries at the top of the pyramid reaching frontiers and a large concentration of countries continue to remain stuck at the bottom. The top few achieved the fastest growth in terms of technological upgradation and the rest although made small leaps back and forth continues at the same level of sophistication as they were in 1971.¹⁷ These are worrying facts that makes propositions of GPN analyses less convincing. The asymmetry seems to be structural and the dynamics of power and profit need to be probed into going beyond the standard notions of value added.

Value added is simply the difference between the price of output and input. Assuming a competitive market, the seller of the product would not be able to influence price and hence value added would only include normal profits. On the other hand, if the producer has some privileged access to certain inputs or if the technology or the organization involved in a particular case is higher compared to the average of this industry then the value added would include a component of rent over and above normal profits. Analyses based on value added in a particular stage of production is confined to looking into the distribution of this value added in terms of profit, wages and rent. And therefore the entire discussion is focused on changes in that particular stage of production missing out the crucial fact that all these factor shares are part of the surplus value created in the entire process of production. This is also the reason why most of these analyses cannot explain how the major shares of rent are being accrued to stages of value chain that are not directly linked to production. Marx was categorical in his critique of classical economists: "All economists share the error of examining surplus-value not as such, in its pure form, but in the particular forms of profit and rent."¹⁸ In fact Marx's critique of Ricardo's value theory rests on this crucial point. The production of surplus value is prior to its distribution as profit or rent and hence it is completely erroneous to try and explain the origin of profit through its distribution. Smith's natural price or Ricardo's cost of production was assumed to be equal to labour values. The method was to determine the magnitude of value of the commodity by labour time and see whether such determinations are consistent with other economic relations or categories. In fact Ricardo assumed a profit rate without explaining its determination and tried to see

¹⁶World Bank (2018) The trouble in the making? The Future of Manufacturing-led Development

¹⁷Thomas Kemeny (2009) Are international technology gaps growing or shrinking in the age of globalization? *Journal of Economic Geography* 11 (2011) pp. 1–35

¹⁸Karl Marx (1963), *Theories of Surplus Value*, Volume 1. Moscow: Progress Publishers, 1963.

whether such rate is consistent to the value determined on the basis of labour time. Marx's fundamental departure in this regard was the ontological priority of total capital and the determination of the general rate of profit following from the crucial insight that profit is accumulated as a class property in the first instance and not as individually determined gains of particular enterprise. The neo-Ricardians argue on similar lines that if the physical data relating to technological conditions of production and the real wage is given then the rate of profit and the prices of production at that stage of production can be determined without the notion of labour values.¹⁹ It actually undermines the fact that there is a regulation of social allocation of labour which is much more fundamental than immediate fluctuation of prices. In capitalism when commodity production is the dominant form, exchanges take place on the basis of a quantification of different qualities of labour as abstract labour, and the amount of such labour considered to be socially necessary to produce a particular commodity at a particular point of time determines its value. Hence there is a social process involved in the determination of value. Assuming production as completely technical process and therefore distribution as the only social domain of contestation is the premise on which neo-Ricardians shift focus from the production and appropriation of surplus value to confining it into a question of distribution alone. In fact, as Shaikh (1982) argued that the so-called physical data of inputs and outputs is an *expost* magnitude of the real determination of value.

Marx's analyses invokes a conceptual distinction between total capital and surplus value on the one hand and distribution of that surplus among competing capitals. In *Grundrisse* and *Capital I* the entire focus is on total capital and production and appropriation of surplus value. In *Capital III* Marx focuses on the distribution of appropriated surplus. The idea is that the rate of exploitation or the ratio of surplus to variable capital or between paid and unpaid labour is the same in ideal capitalism in its pure form ignoring deviations due to existence of monopoly or pre-capitalist relations of oppression. In that case with equal rates of exploitation surplus value is simply proportional to variable capital. But different industries use different amounts of constant capital per labour as required by the specificities of products they create. Since different total capital set in motion equal quantities of labour, the ratio of surplus to total capital or the rate of profit varies among industries. Now since rate of profit tend to equalize across industries surplus value undergoes a double transformation qualitatively and quantitatively. The qualitative transformation is common to all where each and every capital realizes surplus value as profit as a result of expansive capacity of total capital. On the other hand, the quantitative determination of the distribution of this total profit depends on the respective shares of capital in the total pool of capital. Production structures that involve higher capital per labour or higher organic composition of capital derive profits more than proportional to their contribution in total surplus value and those who use more labour per unit of capital would receive less than proportional share compared to

¹⁹ Anwar Sheikh (1982). Neo-Ricardian Economics: A wealth of algebra, a poverty of theory, *Review of Radical Political Economics*, 14(2)67-83.S

their contribution in total surplus value.²⁰ The moot point however is competition between capitals will drive these fluctuations towards an average rate of profit and the long run normal prices will systematically fluctuate around value both upwards and downwards. According to Marx the net of these fluctuations in the aggregate is zero and hence Marx arrives to this conclusion that sum of profit will be equal to sum of surplus value and sum of prices will be equal to sum of values. Therefore, value continues to be the regulator of the allocation of social labour and differential profits are primarily the result of differences in the organic composition of capital. In other words, surplus value created in a particular stage of production is only potential profit not the actual one while the actual amount of profit depends upon two kinds of transfer within the circuit of capital one within a particular industry or intra-industry and the other between industries or inter-industry. Within a particular industry there is some average capital for whom prices of production would be proportional to their value. Producers those are more efficient than the average or normal capital would end up realizing value greater than what they individually produce and vice versa. So there would be an inter-industry transfer of value from less efficient to more efficient producer within industry. Moreover, there would be an inter-industry transfer of value from industries having low organic composition of capital to those having higher organic composition of capital. The profit realized in a particular stage of production is therefore a result of the total surplus value produced and nature of transfers that takes place because of the dynamic process of competition within capitals within and between industries. The inflow and outflow of capital driven by differential profits finally leads to a convergence towards general rate of profit for the whole economy. In this scheme of things if the technical composition of capital of a particular industry moves faster than the pace of innovation of a firm in that particular industry it is perfectly logical to assume a decline in the relative share of returns even if improvisation takes place in a particular stage of production.

Considering the component of rent within value added Marxian analyses provides a better cue to understand the perpetual technology gap between advanced and developing countries. Rent that is additional return over and above the average rate of profit arises from the surplus value produced within the system but it accrues to producers who either enjoy privileged monopoly access to certain resources or innovate or even evolve particular organization of production that could be more productive than the average capital. But this is only a necessary condition of creation of rent. The sufficient condition of the existence of rent, as Marx argued, depends on whether that part of surplus value is taken aside from the process of equalization of rate of profit²¹. Therefore, sources of rent should be protected from capitalist competition and this requires an architecture of property rights that deny access to specialized access to resources or assets. Here comes the question of power and the designing of the architecture of institutions that destroy certain monopoly rights and creates others. Resources that are created in the North such as knowledge and

²⁰ Karl Marx (1959). Capital Vol. III, Moscow: Foreign Languages Publishing House.

²¹ Ibid.

designing is highly protected by patents, royalties and through various other forms of property rights. While labour, that the developing South has in abundance are made easily accessible to global capital. As a result, in the spheres of labour intensive manufacturing and standard services capitals from the South compete with each other and bring down the offer prices further down producing larger gains for MNCs and TNCs. This leads to widening gap between North and the South in terms of relative gains derived from global production networks as reflected in the deepening of the smile curve.

In sum the Marxian analyses offers a better understanding of the declining share of value added for the developing countries as follows. First, there would be a transfer of surplus within industry from less efficient modes of production to more efficient ones. The latter in most of the cases being located in advanced countries would have individual values less than the social average and since prices at which commodities are sold are proportional to social average values advanced countries would realize more value than they produce. Regarding inter industry transfer of value, given the structure of global trade, goods produced in developing countries involve production structures having relatively less organic composition of capital, hence, transfer of surplus would again be in the direction from developing countries to advanced countries. This direction would alter only if the relocation of manufacturing from advanced countries to developing countries assumes a particular pattern. That is high efficiency producers in high organic composition industries are proportionately more after relocation compared to low efficiency producers relocated in low organic composition industries. This is not however the empirical pattern of relocation of industries that resembles reality of the world today. Second, deriving rent as return over and above average rate of profit requires not only creation of scarce assets but they should be protected through institutional structures of property right. Resources such as knowledge and designing in which advanced countries are placed at an advantageous position are adequately protected while natural resources and labour that are in abundance in developing countries are increasingly made accessible to global capital. Third, while discussing production, appropriation and distribution of surplus value Marx maintained throughout that exchanges take place on the basis of equivalence of value. This is a conceptual abstraction used by Marx to show how exploitation of unpaid labour takes place even in an ideal structure of capitalism where commodities including labour power are exchanged at their values. However, it does not rule out the fact that surplus profits can be reaped by paying labour below the value of labour power. This has been the norm of exploitation particularly in developing countries through increased subcontracting and outsourcing. Barring labour mobility on the one hand while increasing capital mobility across the globe on the other hand, allows greater transfer of surplus value from developing countries to advanced countries. Fourth, the question however remains why and how developing country producers who generally produce at an organic composition of capital below the industry average

could survive in the face of global competition.²² The answer lies in the fact that either such producers compromise on the rate of profit or reduce cost of production by extending working hours or by way of intensification of labour process. In that case firms sell at a price that is more than the minimum required for survival but less than the price of production of average capital.

GPN as the New Template of *Empire*

This paper was aimed at delineating the relation between power and profit as it works through the channels of global production networks. Increased financialisation in the current process of globalization has immensely influenced such networks as firm's investment behavior factors in not only interests to be paid to borrowers but also takes account of shareholder returns. This prompts investment to shift further towards high valued activities rather than in standard manufacturing and demands a higher concentration of capital as firms prefer to deal with few suppliers who could go through stringent monitoring of supplier performance and can share pains of price deflation and other uncertainties.²³ Production undoubtedly becomes subservient to finance but the reproduction of structural asymmetry assumes a complex form actualized through various interactions between global and local capital. The apparent 'decentering' of production and universalization of capitalist imperatives defines the new global hegemonic. The impossibility of diffusion of capitalism in the monopoly stage no longer holds true as capital relations tend to invade every nook and corner of the world. We see the *Empire*, where imperialism does not require a monopoly over political rights, rather economic power expands beyond the limits of direct political control. The asymmetry in today's capitalism cannot be conceived as a conflict between advanced and developing nations rather nation states and regions across the world are fitted into a particular role structure in the production, appropriation and distribution of surplus value within the hierarchies of capital. The hierarchies of capital need not always match with the political hierarchies of nation states but every node of such interactions are subservient to the imperatives of global capital. The articulation of the imperatives of Empire appears to be abstract and omnipotent at the same time. GPN in this context emerges to be the new template of power and profit in the sphere of production. It assumes a neutral structure as if wherein economic agents from anywhere and everywhere in this flat world can participate on the basis of equal footing and share higher gains through improvising their particular contribution. Marx's *Capital* once again shows us that capital is a social relation and asymmetries are reinforced at the first instance through the articulation of law of value which is further accentuated by redefining the institutional architecture of property rights that define the emerging institutional architecture of the Empire.

²² For detailed discussion see Satyaki Roy 'Rent and Surplus in Global Production Network: Identifying Value Capture from the South' *Agrarian South journal of Political Economy*, 6(1), 2017.

²³ Ellen Meiksins Wood, *Empire of Capital*, London, New York: Verso, 2003

