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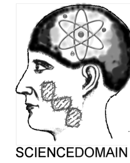

Nations and Global Economic Competition: Variable and Zero Sum Games

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Author's contribution

The sole author designed, analyzed and interpreted and prepared the manuscript.

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ABSTRACT

The new China plan for a major state sponsored investment in Pakistan confirms that governments do not simply leave the nation's *competitive edge* to the market. The competition between nations in the global market is not merely an ocean variable sum game, but it involves also zero sum games, or conflicts. Thus, one may wish to reflect upon the key concepts involved in the enquiries into economic competition, focussing in particular upon the struggle among nations to promote their material interests or national favourite firms. One may examine the various models employed in economics and the social sciences to capture how they model key features of the global market economy with regard to competition. A new form of economic warfare is China's broad penetration of African country economies, involving a large set of transactions–often long-run, trading infrastructure, mining projects and finance against natural resources, securing long lasting imports to China and at the same time promoting exports from China. We must analyse how nations position themselves in the global market place, protecting so-called national interests in their economic niches, fearing the zero sum implications in the conflict among economic interests.

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Keywords: Laissez-faire or neo-liberalism: comparative advantage; niche; competitive edge; factor endowment exchanges; level playing field; competition: firm; national and institutional competition; global competition as zero sum or variable sum games; national interests; key industries; industrial policy; de-localisation; krugman against thurow: "head to head"; New Colbertism; list; gershenkron; johnson; EU decline; rise of China's global economic strategy; state sponsored economic penetration.

1. INTRODUCTION

In the stylised discourse of the neo-liberal period, starting around 1980 and expressed in the Washington Consensus and the New Public Management (NPM) philosophy for public policy in affluent countries as well as in the Structural Adjustment Policies of the IMF and the WB for developing countries, one encounters the notion that competition among firms, entrepreneurs, bidders, agencies etc. is the most effective mechanism for social interaction, when it comes to the allocation of economic resources and generation of economic value. The endorsement of competition had a strong theoretical underlining in the teachings of the Chicago School Economics as well as in pure mathematical economic modelling, or Walrasian equilibrium theory.

However, the financial crisis starting in 2007 [1], the re-emergence of Keynesian economics [2] together with the difficulty of the austerity approach in Western countries, according to John Cassidy The Logic of Economic Calamities from 2010, have led to a critical enquire into the neo-liberal model of competition, as conducive to social or Pareto optima. One needs to contrast it with the opposite view of competition as involving conflict among nations, or struggles in zero sum games. How, then, to conceptualise competition?

The neo-liberal philosophy of free competition among nations has been enshrined in the dominant discourse in the WTO global competition regime with its principles of mutual reduction of tariffs and quotas, anti-dumping procedures, proportionality and transparency, public procurement, etc. Yet, this free trade philosophy has always been challenged by the opposing theory that claims that governments try to protect national interests and promote favourite firms in the global market place.

The involvement of government in protecting the competitive capacity of the country appears clearly in the recent currency wars, taking the form of the model of "quantitative easing". QE leads to a strong depreciation of the national currency (US dollar, Japanese Yen, the Euro), which benefits exports and hurts imports a lot. Thus, governments certainly look upon economic competition as a major concern in several ways.

2. GOVERNMENTS AND THE MARKETS: WHAT KINDS OF GAMES?

One may approach competition from two angles, first the domestic market and second the international scene. Typical of globalisation is that the two have become intermingled to a large extent. Already a key institutional theoretician, Torstein Veblen linked around the Great War the fate of firms in the domestic economy with competition in the external, or global market.

The stylised image of politics is that of involving confrontation or often violent conflict (zero sum games), whereas economics tends to modelled as bargaining and cooperation (variable sum games, win-win) [3]. These standard dichotomies need to be questioned, both theoretically and practically. Thus, rational choice scholars underline that politics, especially in countries operating on the basis of a set of well-ordered rules, involve lots of bargaining or negotiations: "Politics is deal making", states Shepsle [4]. But can we, then, also say that economics contains a good portion of conflict, perhaps even violent ones in zero sum games.

Generally speaking, looking at the history of economic thought as well as at the theory of political economy, one may argue that economic competition tends to modelled in two contradictory ways. On the one hand, laissez faire economists view competition as a mechanism for achieving Pareto-optimal outcomes, as the competitive equilibrium renders the lowest price and delivers the maximum production feasible. On the other hand, Marxist, neo-Keynesian and institutional economists view economic competition as a struggle with whatever means available for generating profits, often resulting in zero sum outcomes with monopoly, oligopoly and one-nation dominance in a global sector.

3. MEANINGS OF "ECONOMIC COMPETITION"

Economic competition can be enquired into through two entirely different perspectives. One approach to economic struggle targets the process of competition, the means employed and the extent of adversity manifested by the participants. The other approach looks at the outcomes, especially whether the consumer benefits from producer competition in the form of lower prices and bigger output. One finds the first perspective with scholars doing empirical research into processes of economic change, often Marxist, radical or institutionalist scholars. The alternative approach is to be found in mainstream economic theory, especially with a neo-liberal bend, using the Walrasian equilibrium model that full competition promotes Pareto improvements. Thus, economic competition has been analysed as either predominantly a zero sum game or as basically a variable sum game.

3.1 Dictionary

Consulting a standard dictionary, one may say that the core meaning of "economic competition" is the following according to a dictionary: "Competition" stand for:

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a business relation in which two parties compete to gain customers; "business competition can be fiendish at times"

business relation - a relation between different business enterprises

price competition, price war - intense competition in which competitors cut retail prices to gain business

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Source: based on word net 3.0, farlex clipart collection. © 2003-2012 Princeton University, farlex inc

Business competition focuses upon sales, profits and market shares. But, theoretically, one speaks of three kinds of competitiveness in the global economy:

a) Firms or companies: One outperforms another in sales or profits taking perhaps market shares. Example: Which is most competitive, Apple or Samsung, in electronics?
b) Countries or nations: Entire societies offer a more or less competitive environment or business culture. Example: The Eurozone harbours a competitive rift between Northern countries and Southern ones;
c) Institutions: Country differences in economic output is said to reflect the set of institutions in the nation, especially in the political economy of the country. Example: Market allocation tends to be superior to budget allocation, or planning.

Thus, for instance one speaks of a set of market institutions ("the institutions of capitalism according to Williamson, [5] as stimulating towards firm or country competitiveness more than other kinds of institutions, like the planned economy or crony capitalism. Acemoglu and Robinson [6] identify *inclusive* institutions in the economy as well as in the polity as especially conducive to country affluence, being superior to *exclusive* ones.

Perhaps it may be pointed out that one should make a distinction between orderly economic competition and savage forms of competition. The former requires that there is a set of rules that are followed by the contestants and enforced by a Third Party – i.e. we have institutions in place domestically or internationally. On the contrary, naked competition is conducted with whatever means are available in order to prevail, most often illegal ones. Yet, there is ambiguity concerning the rules of competition, as strategies of competition may display opaqueness: What is really free or fair competition? At the end of the day, courts play a major role in deciding about the correctness or fairness of competitive behaviour – consider e.g. the enormous legal processes and litigation concerning monopoly and oligopoly in anti-trust law, or the endeavours of the International Court of Arbitration.

I wish to argue that economic competition can be analysed from two perspectives, namely both as a zero sum game and as a variable sum game. It depends upon the stand-point adopted. Competition between two or more firms is a zero sum game for the competitors, like Nokia against Samsung, but for the market as whole it is a variable sum game, involving increases in total global output. From the point of view of nations, the outcome of giant firm competition may be the loss of an advanced industry, like for Finland.

The standard meanings of "competition" in general – social life, economics, politics – include the following connotations:

1) Rivalry, opposition, struggle, contest, contention, strife, one-upmanship (informal) There's been some fierce competition for the title.
2) Opposition, field, rivals, challengers In this business you have to stay one step ahead of the competition.
3) Contest, event, championship, tournament, quiz, head-to-head He will be banned from international competitions for four years.

Source: Collins Thesaurus of the English Language. 2002 HarperCollins Publishers 2002.

We should find these aspects of confrontation and rivalry also in economic competition.

3.2 Game Theory

In economic history, economic competition has sometimes taken on the features of warfare, as when a country exploits another under a colonial regime, for instance India under British rule, favouring British industry ahead of Indian industry. Countries often went to war in order to secure economic interests in trade, agriculture or manufacture. Whether it always paid off is another question, as warfare tends to become very costly on its own terms. Thus, one has asked: Was colonialism profitable at all, globally speaking including the administrative burdens?

The debate between free marketers and Marxists has a long history, dealing with key themes in economic theory, like trade, foreign direct investments, regulation, anti-trust policy and monopoly as well as oligopoly. Here, we shall focus upon the present day situation with free trade and foreign direct investments among nations as the central topic, given that several areas of economic competition have been deregulated globally or regionally. Is global competition fair competition, or is it economic warfare strategy where not only firms but also governments go head to head? Let us first examine the implications of the theory of competitive equilibrium and second look at the risk of industry decline, de-localisation and loss of national economic niches.

Thus, one should question this simple classification of economic life as overwhelmingly win-win situations, and as an implication politics as fundamentally zero sum situations. It may seem somewhat contradictory to examine economic competition from the point of view of conflict, given the established distinction in game theory between variable sum games and zero sum games. As long as economic competition is restrained by rules and effective institutions prohibiting violent behaviour, it would basically adhere to the logic of the variable sum game. Zero sum games would display the logic of adversity or conflict interaction, whether the means employed are peaceful or violent ones [7]. But governments or nations are much aware of what is at stake in global economic competition for domestic firms, employment and innovation.

4. NEO-LIBERAL MODEL: VARIABLE SUM GAME

Neo-liberalism emerged as a global economic philosophy and policy approach in the 1970s. It is basically a rejuvenated form of old liberalism with Adam Smith and David Ricardo, interpreted in a novel fashion by Hayek and Chicago School economists like Friedman, Stigler, Lucas and Coase. The so-called marketers inspired by these scholars spread neo-liberalism governments and other policy centres, like the WB, IMF and WTO. It favours all forms of free competition in the markets of goods and services, money and financial assets as well as public contracts and welfare provision. Its critique would argue that “free” competition” is not always “fair” competition, especially for economically weak nations [8].

There are always two sides of economic competition. On the one hand, the individual firms – the micro perspective – have to approach the struggle for market shares as a battle where competitive edge plays a considerable role, especially in deregulated markets. On the other hand, there is the national or government perspective, focussing upon the competitive macro position of its entire country globally. The process of globalisation presents the individual firms with an integrated market, where it has to compete both domestically and globally. The same process also makes government look for policies that increase the global competitiveness of its own or national enterprises, one reason being the fear of de-localisation and loss of employment / tax revenues. The Porter model portrays a new global situation where countries face the challenge of competitive advantage more than Ricardian comparative advantage.

4.1 Porter: Competitve Advantage [9]

In the theory of economic competition launched by Michael Porter, the success or failure of nations is linked to their competitive edge. Let us quote from him:

In the modern global economy, productivity depends less on what industries a nation´s firms compete in than on how they compete – that is to say, the nature of their operations and strategies. In today´s global economy, firms in virtually any industry can become more productive through more sophisticated strategies and investments in modern technologies [10:p 16].

The Porter theory of competition conforms to the neo-classical theory of economic growth, underlining the fundamental importance of three factors: Labour, capital and technology, especially the latter. It also sits well with new trade theory that underlines the implications of the rise of the global firm with presence in many countries [11]. International trade between countries has become intra firm trade to a considerable extent.

Porter develops moreover the notion of a *competitive climate* in a country, which is to some extent an endogenous variable that can be impacted upon by government policy-making. Decisive for the success or failure of a nation is the amount of domestic competition in the three basic factors promoting economic growth: labour, capital and technology. Yet, Porter's model does not mention competition as a strategy by governments, involved in a struggle *head to head* with other nations. It entirely rejects the relevance of industrial policy-making by governments.

Consider Diagram 1, which portrays the overall economic advantage – GDP per capita – as a function of the degree of country competitiveness, as measured by the Davos institute index on the competitiveness of a country (GCI).

The finding in Fig. 1 supports the hypothesis that economically successful countries are characterised by high scores on this much debated competitiveness scale. But Porter needs to explain where the climate of competition comes from. He argues that a competitive industry on the global scene is one where there is strong competition domestically among a few producers. Thus, strong internal or domestic competition creates a national competitive edge in the external or global economy. Example: Swiss “horlogerie,” or Swiss pharmaceuticals, the German car industry, manufacture of clothes in Bangladesh, Silicon Valley electronic technology, French wine or luxury items, Korean high technology production, etc.

But one must pose the question: Can and do governments or policy-making advance the competitive edge of national industries by various means? One could think of a variety of measures that increase the competitive edge of a country: Cheap financing, monetary policy like

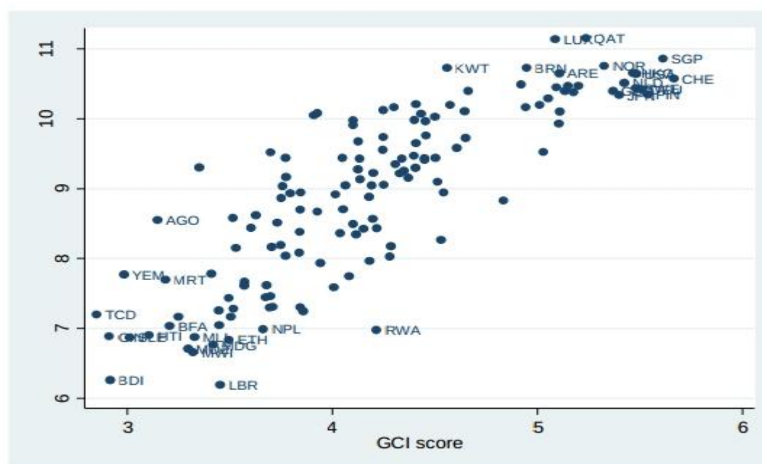

Fig. 1. Country competitiveness and GDP per capita (ln)

Sources: GCI: http://www.weforum.org/reports/global-competitiveness-report-2013-2014 Growth: http://www.imf.org/external/pubs/ft/weo/2013/01/weodata/index.aspx; GDP/capita: http://databank.worldbank.org/data/home.aspx

Note: r = 0.8361

devaluation, technology transfers, copying, joint ventures, etc. It is true that competition is today supported by both domestic and international institutions. Free market economics usually underline the necessity of external rules and their enforcement for the functioning of the competitive market. But if government is to supply these rules domestically or in collaboration with other states on the global scene, what would stop them from trying to deviate from a strict level playing field approach, if this promotes certain national interests like key industries at home?

Emerging economies are not only interested in a level playing field, supported by for instance the WTO. Their governments are also interested in strategies that help their enterprises win international market shares, invite foreign companies to settle down in their country or help their national favourites expand abroad. Established economies fear first and foremost de-localisation. Economic change may be very rapid when an emerging country can draw upon both strategies: expansion abroad and foreign direct investments at home. These political implications of competition are very important for a country and its government, although they tend to be dismissed in a purely abstract theory of economic competition.

4.2 "Law and Economics"

One may consult a blueprint or ideal-typical approach to competition as resulting in Pareto improvements and higher total output with lower prices in the school called Law and Economics. It is a development within up the Chicago School of Economics, spelling out the full implication of bargaining and exchange in all forms of social life, according to Demstez [12].

The scholars who contributed to the school *Law and economics*, like e.g. Posner RA., would be inclined to reject the Schumpeter view. According to *Law and economics*, the market has an inbuilt drive towards the perfectly competitive equilibrium, especially when domestic markets are linked globally in one single market economy. Basically, the size of the market is determined by the law, meaning that global competition is feasible when there is legal order sanctioning a complete level playing field all over the world [13]. Neo-liberal economists would argue that only the institutions of free market economics with a neutral state can bring lasting welfare [14,15].

This school of neo-liberalism sees restriction upon competition as coming from outside the market, mainly through government interference, often driven by rent-seekers. The importance of regulation derives from the necessity to protect the level playing field from such outside interference. Thus, for instance innovations need to be protected by means of patents, but only for a certain period of time. Monopoly or oligopoly is only sustainable when supported by forces outside of the market. Thus, there is a need for all the time enlarging the market so that contestability can operate. At the end of the, monopoly and cartels are self-defeating mechanisms, when there is open access to the market. And, states "Law and Economics, the size of the market – domestic, global – is decided by the law, i.e. the enforcement of the rules of the capitalist economy.

5. THE ALTERNATIVE DISCOURSE: ZERO SUM GAME

Today economic warfare refers primarily to rapid changes in international trade and foreign direct investments, involving the risks of heavy de-industrialisation, de-localisation and losses of economic niches for the mature economies. The Chinese state led penetration in African countries and Pakistan does not amount to the old form of economic colonialism. Strategies of economic competition become indistinguishable from warfare when politics is employed to conquer countries – real colonisation – or when colonial powers employ their domination to subjugate the economy of the colony. Neo-classical economists have always shown little interest in these forms of outright political intervention for economic objectives, but economic historians debate them often without arriving at consensus sometimes.

Take two examples of purported economic warfare: (1) British rule over the Indian economy, forcing India to buy British manufactured goods and sell cheap primary goods. Yet, whether British colonialism was on the whole profitable or not, when all costs are taken into account has been questioned. It is true that there was a long time in the UK a critique against colonialism partly for economic reasons: "Trade not Empire"! At the of the day, the UK could not pay for maintaining its domination, for instance in India or Africa. (2) The operation *Iraqi Freedom: Cobra,* i.e. the invasion of Iraq in order to purportedly get access to cheap oil. Operation *Cobra* was a complete failure from all possible angles, except that of removing a brutal dictator.

The US army had to pay market prices for the petrol and gas it used for its war machines in occupied Iraq and the costs for the war in Afghanistan and Iraq amounted to a trillion dollars. Besides, it contributed most significantly to the present total chaos in the Middle East, where life has become brutish, nasty, poor and short.

When the zero sum aspects of economic competition are emphasized, it is rarely a question of colonialism, which is outdated. Thus, the Soviet Union exhausted itself not only in the failed interference in Afghanistan but also in providing more or less free or subsidised resources, energy, arms to its European or African satellites or Cuban allies.

5.1 Weber

In Economy and Society [16], Max Weber underlined that social life is all the time replete with fighting over advantages or opportunities, the struggle resulting in what he called "*Auslese*" or selection. In all forms of social interaction, there is an element of collision of interests of various kinds. This was the basic insight of Weber´s realism, but he was quick to point out that processes of selection did not necessarily involve violent confrontation. His conceptual starting point when outlining a set of key sociological concepts agrees with the standard approach to the semantics of “competition” in dictionaries.

Thus, Weber underlined the dichotomies between cooperation against conflict as well as peaceful versus violent conflict. He counted economic struggle in *modern capitalism* as a form of conflict between economic agents under the institutions, especially when there was competition with free entry. He no doubt regarded economic competition as peaceful conflict in the normal case, like voting in politics. But as economic historian of both the Ancient period and the Medieval ages [17,18], he often underlined forms of oppression in economic structures – agricultural as well as mercantile and industrial, like his compatriot Werner Sombart, separating in his *grande* theory of capitalism between early, high and late stages or capitalisms [19,20].

5.2 Veblen [21]

When one turns to detailed enquiries into industrial change on a global scale, one encounters several examples of competition as economic warfare. Today, major industrial change comes from de-localisation, meaning the transfer of firms or parts of entire industries from one country to another, or from foreign penetration into core industries in a country, or both. De-localisation is hardly a variable sum game, as one country may lose considerable employment without any compensation in sight, at least in the short run perspective. With delocalisation often comes changes in ownership, as firms in dynamic emerging economies take or assume large stakes in enterprises in mature economies. Differences in economic growth leads sooner or later to foreign take-overs.

Institutional economist Veblen in Imperial Germany and the Industrial Revolution (1915) was well aware of the major industrial changes going on around the First World War, looking at the world conflict between nations against that background. If a nation can capture a new industry, it may benefit tremendously at the expense of other nations. Today, the enormous expansion of industrialisation in South, East and Far East Asia has come with heavy losses of industry in both Europe and the USA as well as ownership transitions. Whether government had a big or a small hand in these developments that now result in growing affluence in Asia but austerity and unemployment in the West, can always be debated. The global market forces push themselves for de-localisation. Whether de-localisation is supported by currency depreciations is much debated today, given the quick rise of China as an industrial super power [22].

5.3 Schumpeter

One may approach competition from two different angles, namely that of the firms in the market (micro) and that of the state, supervising the markets (macro). Schumpeter [23], rejecting the general equilibrium approach, argued that competition would tend to be fundamentally instable from both the micro and the macro perspectives. The entrepreneurs or firms in the market place would resort to *creative destruction* in order to create monopoly or oligopoly, which would allow them to engage in full scale profit maximisation. Innovation upset the competitive equilibrium, allowing for short term excessive profits. Yet, duplication and mimicking with free entry would erase these excessive profits, leading to the economic downturn.

In the long run, government would intervene to stabilise these fluctuations in the business cycle, caused by creative destruction through its "*march into socialism*", eliminating the jealousy that capitalist success results in as well as the poverty of economic depressions. On this point Schumpeter shared the pessimistic view of Sombart [20] about the future of capitalist competition, but Weber on the other hand rejected forcefully such dire predictions about the victory of socialism over capitalism or bureaucracy over the competitive market economy. Also the new Soviet Union would have to rely upon market forces, if it were to survive, Weber predicted [9].

Of Schumpeter's two ideas on competition, only that of innovation and contestability has survived. Schumpeter definitely modelled the process of competition – whether domestic or international – as a kind of merciless warfare concerning market shares, where an intruder by means of innovative practices could eliminate the established players in a zero sum battle for market shares. The consumers could sit and watch the fight between the major entrepreneurs or firms dinosaurs, but for the employees the predicament could mean too much risk, once monopoly was broken successful invaders, driving prices and profits down.

The neo-liberal critique of Schumpeter would claim that his emphasis upon the capitalist tendency towards monopoly and oligopoly was misplaced. In a general equilibrium perspective, monopoly or oligopoly constitute in reality self-defeating market strategies, when entry is open and the market – huge or small – is basically contestable [25]. Demsetz would certainly have been critical of the EU anti-trust case against Google, as only market forces, not government or regulation, can set limits to the market power of giants. Anti-trust policy-making entails punishing the winners for being best in competition, i.e. having the lowest prices for the best products.

One may point of that Schumpeter's model of the instability of economic competition offered a dynamic explanation of the capitalist business cycle. The ferocity of competition would account for the huge swings between boom and bust. As new innovations promoted monopoly and oligopoly, open entry called for intruders to eliminate surplus profits until all competitive advantage had been sucked up, leaving the economy in a state of over production. Endogenous growth theory has developed the Schumpeter ideas of economic competition as the road from innovation, market power and competitors' copying, to explain the rise and fall of players in the global competitive market [25].

5.4 Wade and Chang

The industrial policy debate between free market economists and state capitalist theorists never resulted in a conclusive explanation of the Asian miracle, its sources and mechanisms. On the one hand, it was argued that import substitution and export orientation had helped several firms to reach sufficient size. On the other hand, it was counter-argued that a number of firms succeeded despite industrial policies, due to acceptance of market pressures. Only the the fully informed market can pick winners, never government or a supra national commission.

The so-called Asian developmental model approached economic growth as a zero sum game, where market shares were up for grabs. Wade [26] argued forcefully that governments could steer markets to the advantage of national interests, but his thesis has been criticised [27]. Returning to the theme, Wade [26] insisted on the advantages of a developmental state, supported by Chang [28,29].

Market shares constitute a zero sum game, at least in the short run. Internally, monopolies and oligopolies attempt to maximise market shares in order to control price and quantities. Globally, the MNCs or TNCs similarly aim at securing market shares in numerous countries in order to exploit the benefits from economies of scale. Yet, the struggle for market shares typically runs into some severe collective action difficulties, especially in the long run. Thus, we have the following arguments for the competitive nature of so-called *ocean* markets, giving even giant firms only the option of "camping on the seesaws":

- When one player tries to maximise market shares, this firm will face sooner or later similar tactics from other players – the PD game, or collective foolishness.
- The strategy of maximising market shares is costly, especially when contested by other firms – the so-called *Chain store Paradox*.
- When the force of the state is employed in these tactics of securing market control, government tends to run up various costs

– dead-weight losses and rent-seeking costs.

Yet, these arguments against the governance of the market do not entail that states are not prepared to engage in various strategies and tactics improving competitive edge. There are examples of great success for industrial policies, but also of some dismal failures. One is reminded of the contrast between East and South East Asia on the one hand and Latin America on the other hand where the economic philosophy of Raul Prebisch in the ECLAC (Economic Commission for Latin America and the Caribbean) failed completely as similarly Singer's policies with the UN. But there is more to be said about industrial policy-making.

The theory that the state can promote capitalist development by means of a set of rational policies did not originate with the so-called Asian Tigers – economic nationalism. On the contrary, it belongs to Western economic thought, constituting one sub-field like Marxism, besides mainstream classical or neo-classical approaches. Thus, one may in this tradition mention the following ideas about state led or initiated economic development in collaboration with capitalist firms or entrepreneurs:

I) List [30]: The German economist List outlined already in 1841 a coherent framework for the national promotion of industrialisation in the country economy, although rejecting the Marxist idea of abolishing private property. List was as a matter of fact quite influential, especially for the emergence of the *German historical school* in economic theory: Schmoller, Sombart and Weber. With the strong German influence upon the *Meji Restoration*, it is plausible that Japan adopted List´s framework. However, in Germany and Austria the marginalist framework of Menger proved the strongest in the long run, supported by Swedish economist K. Wicksell.

II) Gerschenkron [31]: When explaining the rise of East and South East Asia to world prominence in the global market economy, he resorted to capitalist-statist notions. Gerschenkron argued that young economies can catch-up quicker than the development path of older economies, especially if they can master industrial-policy making, including export promotion, import substitution and direct copying of the technology of more advanced countries – the so-called new comers` advantage.

Johnson [32] supported the idea that countries can use industrial policies successfully, explaining Japanese economic success as the result of state intervention. The reply from neo-liberal scholars was that Japan and the other Asian Tigers had succeeded *despite* industrial policy-making by means of access to cheap capital, harsh regimentation of the labour force and lots of copying and little of productivity gains due to internal innovations [2].

5.5 Thurow

This question about the nature of economic competition in the global market has been debated intensely since the publication of Head to Head by L. Thurow [33]. The perspective upon international trade as a conflict between countries - head to head - was sharply rebutted by P. Krugman (http://www.pkarchive.org/cranks/Thurow.html). Interestingly, Krugman took the classical Ricardian view upon trade as a variable sum game with possible Pareto improvements for all partners, despite his emphasis upon the political elements in other forms of economics, especially macroeconomics.

It shoul be admitted that Thurow [33] received little appreciation in terms of his book on the future competition between on the one hand the US and the EU versus on the other hand Asia: East, South East and South Asia, despite obvious developments indicating this region's rise to economic dominance around 2000. Krugman among others argued with much emphasis that such a perspective upon global trade and market shares for the major country companies entailed too much of a zero sum perspective upon international trade and investments. Global trade and FDIs more resemble variable sum games with feasible coordination successes, China or South Korea investing in Europe due to comparative advantage, the search for new niches, or mainly because of competitive edge. But were really Thurow´s predictions or warnings so irrelevant?

Whether economic transaction - domestically or internationally – are seen as constant sum or variable sum games depends upon how the concept of competition is defined or approached, whether it is a matter of competition between firms, countries or even institutions.

5.6 Renewed Marxist Analysis

John Bellamy Foster and associates have launched an attempt to renew the Marxist analyses of global capitalism, originating with Hilferding as well as Baron and Sweezy. In terms of the approach here, the neo-Marxist analysis [34,35] looks very much as the global market as a constant sum game.

Firstly, the gains from the global market economy are more and more appropriated by the financial system and its institutions, focusing upon quick profits from managing gigantic transactions in paper assets. Thus, the centre in the neo-Marxist approach is no longer the accumulation of surplus value in the real economy, the capitalist exploiting the worker. Instead, the current crisis in the EU and the US has to with a crisis of monopoly-finance capitalism, and the tendency toward secular stagnation in mature capitalist economies. This reduces investment opportunities in the real economy, driving capital to seek other sources of profit through the financial economy. The construction of a "casino" economy built on increasingly complex financial mechanisms is collapsing under its own contradictions. The monopolization of the economy — when a handful of large firms dominate one or several industries —leads to an over-abundance of capital and too few profitable investment opportunities Absent powerful stimuli to investment, modern capitalist economies have become increasingly dependent on the financial sector to realize profits. And while the financial sector may offer a temporary antidote to stagnation, it is a solution that cannot last long.

Secondly, in the neo-Marxist analysis ecological concerns are added to the picture of global competition. Thus, the relationship between the global environmental crisis and the crisis in the capitalist economy is underlined, while also stressing the imperative for a sustainable, socialist alternative. The reinterpretation of Marx on ecology introduced the concept of "metabolic rift" and it was widely influential. Foster stated:

Developing an environmental sociology as an integral part of sociology as a whole thus requires that we reach back into past theories in order to develop the intellectual means for a thoroughgoing analysis of the present. For environmental sociology the crucial issue today is to abandon the “strong constructionism” of most contemporary sociological theory, which tends to view the environment as simply a product of human beings, and to move toward a more “cautious constructionism” that recognizes that there is a complex metabolic relation between human beings and …. [36] *AJS* Volume 105 Number 2: 366–405

The neo-Marxist recognition of the relevance of ecological concerns contrasts much with policies of Communist regimes. However, it represents a most timely acknowledgement that established measures on welfare like yearly rates of economic growth are defective and should be complemented by for instance ecology footprint scores on pollution of various kinds, including emissions of CO2 equivalents. When environmental costs are added to the calculation of economic growth, numbers become entirely different, i.e. lower figures overall. Yet, one must ask whether the neo-Marxist economic perspective has any plausible approach to ecological policy-making. After all, the planned economies in both Soviet Union and China displayed a shocking neglect of environmental concerns. And China is today the world’s largest polluter through its emissions of greenhouse gases.

Now, neo-Marxist analysis of global capitalism is strongly emphasizing its zero sum aspects, economic growth being accomplished with huge environmental costs and what is left to be divided ending up with the people in the financial system to the exclusion of the poor, the unemployed and increasingly the impoverished middle classes. One may point to interesting empirical evidence for this zero sum approach in the new index of economic welfare, taking into account the environmental run down of the globe and in combining economic growth indices with environmental sustainability indices, as well as in the clear evidence of rising inequalities the world over [37].

6. COMPETITION: THREE DIFFERENT IDEAL-TYPE GAMES

There is no need for anti-trust policy-making, when there is open access. Governments should never engage in market governance, neither industrial policies not welfare state regulation of minimum wages etc. The market is when left untouched from the outside perfect, i.e. moving towards the Pareto optimal equilibrium, or an optimal outcome, as prices are minimised and quantity maximised. However, its basic institutions – property, contract, theft – must be enforced at all times in an effective manner.

In a global market, no firm can control all the market shares, meaning that intruders will have to be accepted. Firms that loose out can always change their niche. Or their employees can be rehired by the successful competitors. Thus, a reduction in the volume of cars produced by French car makers domestically will be compensated by an increase in cars produced by foreign competitors, sometimes produced in France, or by cars produced elsewhere by French car makers (Table 1). Global competition is a variable sum game between countries where firm ownership, from the national point of view is not an important consideration.

Table 1. Competition as variable sum game

Country 2		
	Global expansion	**Domestic concentration**
Global expansion	100, 100	120, 40
Country 1		
Domestic concentration	40, 120	50, 50

There is no rationale for industrial policy, as competition leads to the Pareto optimal outcome (100, 100) that is also Nash. Yet, things are of course different in reality where countries fear de-localisation or foreign penetration, especially if it results from unfair competitive strategies. This would amount to the ideal-type situation in neo-liberalism where all the advantages of free trade – comparative advantage, competitive edge, factor endowment differences, economies of scale globally – are conducive to Pareto optimal outcomes. But this is just a blueprint, as economies realities may deviate much from the neo-liberal ideal-type.

First, in a global market economy where the domestic economies have been integrated into global capitalism, nations worry about their competitive edge and the fate of their national industries. They fear that other countries will invade their home markets or capture large parts of their industries as well as force out employment at home in the major process of de-localisation. Thus, nations face the threat of decline from the following developments that hurt employment and innovation:

a) Industry backbone: Nations may lose their traditional niche by either export competition or de-localisation: How to protect the special features of the country competitive edge in for instance car construction, pharmaceuticals, financial services, etc;
b) National research interests: When a country loses its competitive edge, it often implies that its knowledge advantages are also lost. Other countries close the knowledge gap quickly through copying, espionage or research upgrading at schools and universities;
c) Employment and training: The impact upon employment from decline in competitive edge can only be negative: More unemployment. Although the intruders may pick up some of the work-force from national industries, industrial decline weakens a nation;
d) Fiscal deficits and debt, less state revenues, more social expenditures, etc;
e) Industrial security: The future capacity to make innovations that lead to major investments in factories and employment.

Given the interest of nations in supporting research endeavours in universities, schools and institutes, it is little wonder that governments conduct so-called research policies long-term and that governments are eager to be present when big industrial projects are contracted in other countries.

When global competition entails only the redistribution of market shares, the game is basically constant sum (Table 2).

Here, there are winners and losers from global competition over market shares. Country 2 would actually be better off, if there was no global expansion and foreign interpenetration (100, 50), but this solution is not stable, as the equilibrium is to be found in the (120, 40) that is Nash.

One may model a third situation where one takes the internal distribution of gains from free trade and foreign direct investment into account, especially the trade with non-renewable resources, like oil and timber. Let us call it the "Bongo game", after the situation in Gabon, where Chinese companies, supported by the Chine state, penetrate into the riches of this small country to the benefit of the presidential family and friends of it.

This game illustrates another and different aspect of government intervention in the economy, namely to further the private interests of political and administrative elites by various

corrupt practices, destroying rather than enhancing the national interest. In countries with weak institutionalisation, foreign state led economic penetration is easily combined with clan favouritism, looting, patronage, embezzlement, etc.

Table 2. Competition as constant sum game

Country 2		
	Global expansion	**Domestic concentration**
Global expansion	120, 30	110, 40
Country 1		
Domestic concentration	90, 60	100, 50

Table 3. Competition as penetration

Gabon		
	Bongo clan looting	**Country control**
Penetration	60, 40	40, 20
China		
Trade as usual	40, 20	20, 20

When a giant like China enter competition for trade and development of resources in Africa countries with weak political institutions, the gains from international trade may entirely bypass the country population. In Gabon, the profits from global economic competition do not trickle down to the poor population, but ends up with the Bongo clan, for instance in properties in France and a multitude of luxury items of consumption.

6.1 Eurozone Loss of Competitive Edge

As globalisation rolls on with massive changes in both economic life and the environment, one observes certain disequilibria. One of them is the decline of Europe economically at the same time as the economic centre of the world is shifting towards the East, South and South East Asia. Is there a kind of economic warfare going on behind these major developments?

When countries decline economically, they risk losing their niches in the global market economy. Typically, certain key industries or sectors of the economy face grave challenges from competition abroad. Governments step in to help the business community find responses, as a loss in the comparative edge or competitive advantages of a country would have consequences also for the revenues of the state.

Industrial decline raises a number of questions about fair competition in the global market economy as well as calls for strategic responses from both government and the private sector. Actually, processes of competition have more and more been modelled as both zero sum and variable sum games in both the domestic economy – monopoly and anti-trust policy – and the international economy – trade wars. Today, competition is played out in one global market economy. Industrial decline may be looked upon as an external shock to the country in question.

The decline of the EU-land and especially the EU-zone has triggered a debate about free balanced competition at the macro level. It is hardly an exaggeration that the combined outcome of a most severe crisis in the financial economy and the supply chock in the real economy from East Asia has contributed to the emergence of a *New Colbertism*, i.e. the search for some set of industrial policies in order to:

(a) Protect national industries or key niches in the global market economy;
(b) Stimulate innovations that may help the EU countries in a “creative reconstruction”.

Especially, the EU countries with a few exceptions (e.g. Scandinavia, Slovakia, Poland) have cause to reflect over their country competitiveness – see Table 4 with its meagre growth rates for 2007-2012.

Both the US and the EU has for quite some time expressed discontent with the global competition regime, as it is practised through the WTO system. Thus, the massive job losses in the US and the EU are partly blamed upon East Asian tactics to circumvent basic principles of the global trade and investment regime. However, the resort to trade war and various forms of trade and investment hindrances would offset the counter-criticism of “*beggar thy neighbour*” approaches. Competitive devaluations (QE) result in a global PD game with all losing out. Yet, holding down the value of the Chinese Yuan (*Renminbi*) artificially amounts to a form of economic warfare.

France now reflects upon *New Cobertism,* inspired by its mercantilist past with *Jean Colbert,* as a method to save its niches and develop hopefully new competitive global

industries. But as adherents of Chicago School Economics would counter: How can governments make the right choices when all the available information is present only in the markets? And Chicago School economists would not care too much about dumping from East or South East Asia, as lower prices always benefit the consumers in the short run and exhaust the producers in the long run [38].

6.2 Competition as State Led Penetration

A new form of economic warfare is the entire economic penetration of one big country of another small country. In China´s broad based economic policies in several African countries, political penetration or neo-colonialism is not in the cards. But the strategic combination of these different policies leads to an undeniable predicament of economic dominance. The great plan for Chinese led mega investments in Pakistan follows the same strategy of business and economic development, not colonialism. But it will promote Chinese enterprises more than firms from other nations [39,40].

Behind the efforts at establishing and implementation a global competitive regime lies all the time the threat of economic warfare, which when carried to its extreme results in the predicament of the 30s – no trade at all virtually. However, the WTO system is incomplete and opaque as well as operating slowly. It is weak enough to allow for the occurrence of economic competition as zero sum games. When countries cheat on the basic rules, it is not easy to take action. And complaint at the WTO may just stimulate counter-actions from the other party. Thus, when France accuses East Asian firms of dumping the price of solar energy systems, then China puts in restrictions upon the import of luxury French wines, etc.

Table 4. Affluence 2007-2012: GDP and GDP Growth (ln)

Geo	Kod	Loggdp07	Loggdp12	Growth
European Union	EU27	7,09	7,11	0,34
Euro area	EA17	6,96	6,98	0,43
Belgium	BE	5,53	5,58	1,00
Bulgaria	BG	4,49	4,60	2,21
Czech Republic	CZ	5,12	5,18	1,28
Denmark	DK	5,36	5,39	0,61
Germany	DE	6,39	6,42	0,74
Estonia	EE	4,21	4,23	0,49
Ireland	IE	5,28	5,21	-1,24
Greece	EL	5,35	5,29	-1,23
Spain	ES	6,02	6,02	-0,03
France	FR	6,28	6,31	0,63
Italy	IT	6,19	6,19	0,07
Cyprus	CY	4,20	4,25	1,02
Latvia	LV	4,32	4,35	0,49
Lithuania	LT	4,46	4,52	1,14
Luxembourg	LU	4,57	4,65	1,47
Hungary	HU	5,00	4,99	-0,15
Malta	MT	3,75	3,83	1,67
Netherlands	NL	5,76	5,78	0,43
Austria	AT	5,44	5,49	1,07
Poland	PL	5,49	5,58	1,77
Portugal	PT	5,23	5,22	-0,20
Romania	RO	5,10	5,12	0,48
Slovenia	SI	4,54	4,55	0,22
Slovakia	SK	4,74	4,85	2,30
Finland	FI	5,25	5,29	0,68
Sweden	SE	5,53	5,61	1,65
United Kingdom	UK	6,31	6,28	-0,71

Source: World Bank (2011) world data bank: world development indicators; data available from: http://databank.worldbank.org/ ddp/home.do

The incredible Chinese economic expansion since 1980 could hardly have been done without Chinese firms – public, semi-public or private, joint enterprises with the West – defeating competitors in zero sum games all over the globe with tactics that call in question the WTO principles: artificial currency depreciation, dumping, local content, bi-lateralism, infant industries or lack of national treatment, strategic investments, etc. Yet, at the same time complaints against the East Asian dynamic countries have little consequence, as the world economy is heavily dependent upon China and South Korea, Hong Kong and Singapore when they for instance sustain demand for Western products in a variable sum game [41].

Complaints against China for artificially holding down its currency occur daily [22], but result in very little. The now on-going penetration by China of several country economies in Africa should interest the West more. It is definitely a question of combining strong enterprises with state diplomacy to capture often resources that are in finite supply. There is a whole plethora of mechanisms – concessions, licenses, barter contracts, kick-backs, etc – that may be employed to exclude competitors: e.g. Ethiopia, Sudan, Gabon, Angola, Zimbabwe, Tanzania, Zambia. When natural resources are in finite supply, then pre-emptive strategies may be highly rewarding in the global market place. It does not matter that there in an *Ocean Market* of suppliers when the resources in question are being used up quickly, as for instance the valuable timber in Gabon [42].

Government in well-ordered societies are far from inactive when it comes to national interests in the global market economy. They may pay lip service to the level playing field of the WTO regime, but they resort to various strategies and tactics to promote the national firms safeguard or augment their niches. There is a limit to these games, as the spreading of QE shows. If all countries would engage in currency depreciation, then the effects would be nil – a PD game outcome. However, nations may promote national industries in many other ways, like the Chinese penetration of several African and Asian countries as ell as plans for Latin America.

7. NEO-LIBERAL CREDO

The neo-liberal credo has had an enormous impact upon the institutions of the global market economy, especially the basic ideas policy-making in order to enhance open entry, a level playing field, floating currencies and state neutrality *visavi* the economy. Neo-liberalism received much its strength for advances in economic philosophy and econometric modelling after the Second World War, ending up in the notions of rational expectations with market players and overall market efficiency. However, neo-liberalism badly underestimated the role of governments and the state in looking after national interests in the global market place.

In neo-liberal economic thought, the national identity of an enterprise can be bypassed. Ownership and location is inferior ro market performance. And decisive in an ocean market is the management skills of a firm together with its innovative capacity. Realities are of course different. Governments, especially its ministers of finance and employment, follow the developments of the national “favourites” closely, fearing de-localisation and the shrinking of the country niches in the world economy, as well as being prepared to assist in various with the promotion of domestic production. In the last resort, when an industrial giant like French AREVA fails, then the government may invite another government to support a joint venture with its leading firms. Governments and national interests have been much neglected in the ne-liberal credo [43].

8. CONCLUSION

Firstly, governments view the competitive edge of national firms both domestically and internationally with much interest, as if it were a question of a set of zero sum games. Secondly, when the really big contracts about infrastructure projects, oil- and gas exploration, food and agricultural products are made between firms, the corresponding governments are often present simply in order to look after the interests of their national pride enterprises. Thirdly, governments visit each other with a large entourage of business leaders in order to sign multi-billion contracts, with sometimes foreign policy goals hidden. Fourthly, it is no small wonder that one sees campaigns like “Buy American”, not only in the US but also in e.g. France, where Chinese capital is playing an increasing role, not only in the car industry but also in the classical wine production. It has been pointed out that Chinese exporters do not hesitate to engage in large scale contraband in Africa, e.g. textiles in Nigeria (44 – see also The Looting Machine by Tom Burgis from 2014).

It is true that officially industrial policy-making is in the West not regarded as a proper response to the declining competitive edge of a nation. It is not in agreement with the policy emphasis upon a global level playing field, where there is fair competition in all countries. The WTO as well as the regional organisations has devoted much attention to enhancing fair competition, supported by means of rules that are more or less institutionalised. Industrial policy-making is completely at odds with neo-liberal philosophy approaching the global market as an *ocean market,* where countries can develop new niches when they lose their traditional industrial backbone. Thus, competitive games satisfy *in principle* the notion of Pareto improvements, as theoretically speaking compensation is always possible for the losers. Only single firms face elimination, as countries can seize new opportunities in the unlimited global *oceanic* market economy.

Yet, it must be emphasized that *in reality* and *unofficially* countries do try to protect internally or promote externally their core industries, as they know that the call for a complete level playing field is often hypocritical. Or nations attempt to create new spheres of economic interest, like China with its broad penetration of several African economies, offering for instance infrastructure projects against payment in natural resources [45].

In short, competitive edge in the neo-liberal credo is only a necessary condition for successfulness in the global market economy. State support and government sponsored contracting also helps a lot. The neo-liberal blueprint fails on realism, as global market trade and investment may be free but not fair, trading partners not equal in asymmetrical gaming, and distributional impact bypassed. Nations are not passive in relation to market forces in the *Ocean Market*. China for instance gains competitive strength by state sponsored building of huge railroads in Third World countries [46].

COMPETING INTERESTS

Author has declared that no competing interests exist.

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