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Assessing the Solar Energy Dispute between the European Union and the People's Republic of China

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1. INTRODUCTION

CHINA IS A MAJOR trading partner of the European Union (EU), the destination of much Foreign Direct Investment (FDI) by EU firms - and by far the most targeted country of anti-dumping investigations by the EU (and other economies like the US). In the spring of 2012, the European Union and China got embroiled in a tense dispute about trade in the novel but rapidly growing solar energy field. The surge in EU imports of such goods from China - especially of solar panels used in the last stage in the production sequence of photovoltaic energy - prompted a group of EU-located producers of solar equipment to request trade defense measures from the European Commission. After conducting investigations the Commission imposed a provisional anti-dumping duty on such imports in June 2013 while threatening to impose significantly heavier levies on solar panel imports from China if no satisfactory arrangement could be found before 6 August 2013. Close to that deadline, an amicable 'understanding' was reached, whereby China agreed to reduce its overall quantity of exports to the EU and put a floor price on those exports. Thus, a major trade conflict about the largest contested trade volume ever was averted. The paper assesses this recent antidumping case in the light of a changing world economy and the current anti-dumping framework of the European Union. Chapter 2 of the paper introduces the issue by presenting a factual narrative of the specific antidumping dispute about solar panels and recalling its antecedents, in which an almost worldwide hypertrophy of solar energy enthusiasm collapsed into a deep downturn in the solar energy sector.

As exports of certain products are targeted by anti-dumping duties, Chapter 3 of the paper first recalls China's impressive export performance since around 1980, when China opened its economy to the wider world. It then positions the latter within the broader setting of three deeply impacting and intertwined changes in the world's economy which provide a relevant background to the analysis. As a more exhaustive treatment of such complex topics would inflate the length of this paper, only the main essential features are sketched. These three metamorphoses that transformed the traditional channels of cross-border trade into highly complex sets of links between enterprises from different countries are: (a) the continual multinationalisation of a large number of enterprises (via foreign direct investment and contract manufacturing), (b) the increasing fragmentation of production in global value chains, in which multiple tasks are performed and various 'slices' of intermediate goods are manufactured and traded between different countries, and (c) the presently applicable convention in the statistical reporting of trade flows.

In order to provide an adequate understanding of the subject matter, Chapter 4 and 5, furthermore, provide a succinct look at two relevant strands of EU trade policies: The trade and investment relations between the EU and China (Chapter 4) and the methodologies used by the EU in its anti-dumping (AD) actions, particularly those pertaining to China (Chapter 5).

Against this background, Chapter 6 of this paper presents a critical analysis, in economic terms, of the solar energy case conducted by the EU (and by implication, of other similar anti-dumping cases). It thereby considers, on the one hand, various more general aspects of anti-dumping disputes such as the roles of governments versus those of firms, the conflict of interest between producers and importers, and the impact of anti-dumping duties on the competitiveness of domestic firms. On the other hand, specific aspects of the anti-dumping framework of the European Union are discussed, such as the 'public interest' test used in EU anti-dumping proceedings, the market economy treatment of foreign suppliers, the analysis of the economic impacts of anti-dumping duties on different stakeholders, as well as the political dynamics of the solicitation of trade defense measures. Based on these considerations, specific aspects of the dispute between China and the EU are considered, such as the controversial question about China's market economy status and other arguments which have been invoked to discredit imports from China.

Chapter 7 provides some final considerations about the potential lapse of China's market-economy status at the end of 2016. Chapter 8 concludes with some remarks on the future of the EU system of trade defense instruments, suggesting some paths to arrive at more satisfactory arrangements between the various stakeholders involved in anti-dumping disputes.

Before embarking on this ambitious agenda, however, it is necessary to clarify a few self-imposed limits on this paper, lest it becomes unwieldy. First, the paper looks essentially at anti-dumping measures proper, which are still the most frequently operated trade defense instruments (TDI) of the EU. Hence, countervailing'or anti-subsidy measures, which nowadays tend to be resorted to somewhat more frequently, are not included in the following analyses. Yet, the third conceivable instrument, a safeguard against import surges, will be mentioned, as it appears to have been introduced *de facto* as a, perhaps temporary, solution to the solar energy conflict. Second, the paper considers in essence only trade in manufactured goods, not trade in services. Third, the paper looks at the 'real' world of international economics, as related to the border-crossing flows of goods and services, not at the even more globalized field of international financial transactions.

2. THE SOLAR ENERGY SECTOR IN THE EUROPEAN UNION AND CHINA

2.1. The Boom and Bust of the Solar Energy Sector

Renewable energies, tapped from nature itself, open a wide horizon for scientific progress that would bestow incommensurable economic benefits to the world as a whole. Indeed, as soon as developers of solar energy, no longer buttressed by government subsidies, would succeed in improving the technologies (for the generation, the storage, and the transmission of solar power) to the 'grid parity' level, the benefits would be truly revolutionary. The 'grid parity' level is the level at which the cost to install solar energy capacity would descend to that of electricity provided by fossil fuels (coal, petroleum or gas). Solar energy, for example, is inexhaustible, clean and – if it is efficiently captured – has low variable costs. Moreover, and vitally important, photovoltaic solar energy does not release carbon dioxide. Sunshine is also available all over the world, albeit in unequal doses. Hence, the operation of a solar energy system can be organized in a fairly decentralized manner. In due time, solar energy could be delivered in small quantities into individual households and such micro-units might become 'prosumers', who combine the roles of producers and consumers, in the terminology of Rifkin (2014), who anticipates their emergence in thirty years.

Looking back at around the turn of the century, solar energy came to exert a strong appeal in the business world within the span of a few years. In the US, especially in sunny California, a number of firms started to manufacture chips, cells and /or panels. In Europe a similar hype in solar energy took root in several countries, especially in Germany which had established a strong position with respect to silicon, a widely used material, and cell production. Elsewhere in Europe many firms in the energy sector, or even in plumbing, eagerly engaged in the solar sector, especially with respect to the installation of solar panels. The initially rather lavish subsidies to consumers by governments in a number of countries, propelled a booming business. Moreover, the installation of solar panels was viewed favorably by governments, on account of its labor-intensity. In Germany a law in 2000, aiming at developing renewable energies, provoked a real outburst of activities in solar energy. As a result, Germany had the world's highest output of solar energy by mid-2011. Italy and Spain, more generously gratified with sunshine, reached about the same modest, but rapidly rising, coverage of electricity needs. The interest in solar energy erupted quite suddenly in China also, but it occurred at a later stage. The interest arose once the Chinese government had announced that it would provide rather generous subsidies to the enterprises that would enter this new field, which were initially focused on wind energy. Furthermore, firms in China were typically heavily involved in the end phase of the production process, such as that of assembly into solar panels, and intermediary inputs, such as Germany-made silicon cells, were often imported.

In such a propitious setting, the solar industry experienced a meteoric growth over the last decade. A great number of firms initiated the production of solar panels, especially in China, or of components, such as silicon cells. In other regions, particularly in Europe and the US, more on the 'consumer' side, the installers of solar panels tended to purchase panels from the lower-cost producers, quite often located in China. The hype of the solar energy sector (and of its 'cousin', the wind sector) reminds us of the internet hype in the first years of the new century, but which soon capsized into a deep crisis.

The breakdown of the photovoltaic energy sector was as sudden and deep as its ascent had been speedy and promising. The causes of the downfall were largely similar in most of the countries already cited above. Some of the general reasons for the breakdown of the sector include:

- Over-optimism had attracted many firms to start production. Some of these firms were seasoned large firms, with a solid technological craft, but others were small firms with a weak financial backbone.
- Many firms, encouraged by government subsidies, did not hesitate to borrow heavily, especially since interest rates were notoriously low. In the prevailing bullish ambiance, they perceived a golden opportunity that should be availed of as soon as possible and on a large scale. Thereto a number of firms at once set up affiliates abroad, but their forward financial planning was often inadequate.
- The overinvestments entailed considerable overproduction, which, in itself, provoked a downward turn of the prices of their products and of their profit rates, in an already fiercely competitive market.
- Concurrently, some technological advances pulled down the production costs and heightened the rivalry.
- In sum, investing firms had inadequately factored in some characteristics of a seemingly attractive new business, but in a still immature industry, with rapidly evolving technologies. Therefore, there was the related risk that a price war may soon ensue and the likelihood that this new field would attract many new rather adventurous producers.

In addition, the development of the solar energy sector in China aggravated the situation. In China the response of the business world - typically rather by fairly small non-state companies, not large State-owned enterprises (Freeman, 2015) - to the prospects of benefiting from the government subsidies, was much more forthcoming than the government had anticipated. About 400 firms, of varying solidity, plunged into production. Outlets in China remained limited, as the electricity generated could not be loaded on the underdeveloped distribution grids. Yet, due to some economies of scale and partly to lower labor costs, and to some public subsidies, firms in China were able to supply panels at a cheaper price than their foreign rivals (serious estimates, such as at the Asian Development Bank put their price advantage at around 20 % (Xie, 2012)). Several of them, once they were in severe financial straits, emptied their stocks at discounted prices, and flooded the export market, where they found eager importers of panels in the EU and the US. In the main countries involved, quite suddenly several of the factors just mentioned, coincided and provoked a widespread cataclysm, which caused the downfall of a significant number of firms, even among those that were in pole position. The very rapid surge of producers in China and of their exports provoked real disasters in the US and even more in the EU. Furthermore, the concomitant financial crisis that engulfed the world did not provide a favorable background to the solar industry, although the financial tsunami in itself cannot be held accountable for the catastrophe in the solar energy field, as the latter occurred not only in the Western world, but equally in China.

An example which illustrates the downfall of the sector in the United States is the American firm Solyndra, which was first acclaimed as a shining innovating firm. At the end of 2006, it requested a government guarantee for the construction of a new robotized manufacturing facility. In September 2009, the US government granted a subsidy amounting to 535 million USD. However, less than a year later Solyndra ran out of cash. The prices of its panels had dived deeply, while the company was launching a more efficient, but more expensive, technology. In August 2011 the firm was declared bankrupt and more than 1,100 employees were laid off. The strong competition by the Chinese firms Suntech and Yingly was mentioned as a contributing factor, but allegations of illegal accounting manoeuvers have also been leveled.

In Germany, a significant percentage of the firms involved went bankrupt, on account of the keen competition of Chinese imports, the overambitious expansion plans of some firms and the burden of the debts incurred. Amongst the victims were some well-known firms, such as Q Cells and Conergy.

In China, the destiny of many participants in the solar energy sector was similar. Suntech, listed on the New York Stock Exchange, which in 2011 proudly proclaimed that it was the world's largest solar energy firm, was declared insolvent in 2013. Its creditors, notably the state-owned Development Bank of China and the Bank of China, did not renew their outstanding loans and bills to several suppliers of inputs - among them South Korean firms - remained unpaid. Suntech was finally salvaged, in a much slimmed format, by the city of Wuxi, where it is headquartered and employed 10.000 workers, and by a Hong Kong investor. Other Chinese firms, such as Trina and Yingly, which had already built up a solid position in foreign markets, also went through tough times, due largely to the drying up of consumer subsidies in importing countries, but they survived.

2.2. The Anti-Dumping Case between China and the European Union

The preceding exposé already presages the sharp anti-dumping conflict that occurred between the EU and China. This dispute soon became a hot topic in the media and unleashed accusations of varying veracity from interest groups, and even from official spokesmen. As already mentioned in the introduction to this paper, a last minute agreement settled the case, at least temporarily. A succinct narrative of this clash is provided herewith.

As in some other similar disputes, the solar energy anti-dumping (AD) measures were enacted first in the US, ahead of those in the EU. A complaint by producers in the US, led by the American subsidiary of the German firm Solar World, together with six other producers (which chose to remain anonymous), requested action against the imports from China, which had been growing rapidly. The US Department of Commerce enacted an AD duty, amounting to 31% (and an anti-subsidy levy of 73%, as well). Those levies were instantly challenged by a 'coalition for the affordable solar energy', which stressed that the cheaper imports from China benefited consumers in the US and that many more workers were employed in the installation of the imported solar panels than in the domestic manufacturing of solar products. A similar complaint was lodged with the EU Commission by a Pro Sun coalition, equally spearheaded by Solar World, which grouped about 40 producers. The allegation was that manufacturers in China practiced dumped export prices and benefited from massive and unfair subsidies at various levels of governments in China. This move was immediately protested by the 'Alliance for affordable solar energy' (AFASE), an *ad hoc* coalition of about 400 importers, installers and large distributors, who advocated the free entry of solar panels into the EU. As in many other EU-China trade conflicts, the opposition of interests between producers *versus* importers, and users, was obvious and highly mediatized (an issue also discussed in Chapter 6).

While the Commission was investigating the complaints, and statements by EU decision-makers strengthened the expectation that tough trade defense measures were forthcoming, opposing opinions were voiced as well, even within the same country. Member states were openly divided on the issue. In Germany, for example, Chancellor Merkel, who was hosting the Chinese premier, counseled caution. The fear that China, a major outlet for EU business, might retaliate even in unconnected areas was conceivably a major consideration underpinning her position.

Despite strong political headwinds, the European Commission persisted in its AD investigation and stated that it found evidence of price dumping. This is plausible, as in a number of cases Chinese producers facing overproduction and with little scope for outlets within China itself may have directed their sales to the EU at lowered prices to empty their excessive stocks. In June 2013, the Commission introduced a preliminary, rather lenient, anti-dumping levy of 12%. It threatened to transform this into a definitive duty of 47% if, before 6 August 2013 no agreement would be forthcoming. However, a compromise (valid until the end of 2015) was reached at the end of July. In an official memo of 4 June 4 2013, the Commission held that "this (action) is not about protectionism, and not about a trade war, but about re-establishing fair market conditions". It also added that "in the absence of measures, 25,000 jobs in the EU would be at risk ... and the EU's technological leadership would be lost" (European Commission, 'Frequently asked questions', 2013). Close to the expiry date, China undertook to request its exporters to raise their export prices to the level of the prices applied by Korean exporters in the solar panel spot market. In substance, this agreement embodied a (not so) "voluntary export restraint". In the end, 90 firms in China, accounting for nearly 60% of the EU market, accepted that norm while the others were subjected to the higher definite anti-dumping levy (for more details see Naman, 2014).

This agreement has significantly relaxed the tensions and looks balanced. One may surmise that the Chinese government also had misgivings about the overproduction at home which had not been anticipated to its actual extent. This interpretation finds support in the steps that were subsequently taken in China to severely thin out the number of producers and to redirect them more to the domestic market.

There were some dissenting reactions to this outcome. The ProSun group decided to contest the Commission's decision at the European Court of Justice. In September 2015, the ProSun coalition requested the re-opening of the anti-dumping levies. Furthermore, a few other subsequent developments related to the EU-China dispute are also worth mentioning. In May 2015, the Commission initiated an 'anti-circumvention' action, alleging that its anti-dumping duties were sidelined via Taiwan and Malaysia, and in June 2015 the Commission terminated the undertakings by three major enterprises in China, including Canadian Solar. Additionally, the Commission enacted an anti-dumping levy on glass used in the manufacturing process of solar panels. This file, of much lesser importance, stands apart from the solar panel case, which would have been the largest anti-dumping dispute ever, with 23 billion USD at stake.

3. IMPLICATIONS OF A CHANGING WORLD ECONOMY FOR CHINAS EXPORT PERFORMANCE

Anti-dumping actions impose import duties on specific goods which are indicted of being imported at dumped prices (see Chapter 5 for the specific EU-China anti-dumping nexus). For many years, China stood out as the country whose exports are the most targeted by anti-dumping duties (and for a few years also by anti-subsidy actions). Hence, it is advisable to put the overall course of China's exports in a proper and wider perspective.

Therefore, the following chapter provides first a discussion of the role of foreign direct investment for the Chinese economy. Then it provides some comments (in highly abridged format) about three interrelated world-shaking developments, namely (a) the still ongoing process of multi-nationalization of a growing number of firms, (b) the more recent spread of global value chains (GVC's), and (c) the spectacular growth performance of China since 1980, and more particularly of its export trade, although the gross trade statistics need several qualifications.

3.1. The Role of Foreign Direct Investments in the China Setting

The significant role of foreign multinational firms in the Chinese economy and in its exports is widely acknowledged. Hence their role requires only few, but nevertheless important, comments. A firm that establishes merchanting or, more impressively, productive facilities in a foreign jurisdiction earns the epithet of a 'multinational enterprise' (MNE). The latter are most often rather small, especially in their early stages, although the expression MNE naturally evokes an image of giant MNEs, which play a leading role in the world economy.¹ Even though the very word of 'MNE' often raises criticism, one must confess that they are courted by most governments as they are harbingers of jobs and of technological progress.

These firms must obviously assess whether to supply a promising market abroad by way of exports from a 'home' production platform or by implanting production in the 'host' country. Outward FDI may be motivated by the low cost of manufacturing of labor-intensive goods, such as textiles, shoes and toys. The Pearl River Delta has attracted a plethora of such direct investments, largely on account of their relocation from Hong Kong or Taiwan with the aim of subsequent re-exporting, either back to the home market or to a third-country destination. Yet, already in the early days of incoming FDI in China (in the 1980's) the 'market-seeking' intention of capturing a slice of a promising market in China itself was the primary objective. The 'market-seeking' intention overshadowed the motivation to serve foreign countries out of one's own new installations in China, as was typical for simple, labor-intensive goods.

3.2. Contract Manufacturers

So far, this text has brought to the fore the stylized categories of firms, which set up production with a similar product range in their own affiliates in 'host countries'. Yet, the present-day international business scene is much more diversified, in its functional specializations, and in its complex nexuses.

¹ Recent research at Bruegel on European firms document that large enterprises score better than Small and Medium Enterprises (SMEs) on the criteria of economic performance, such as profitability, innovation and wage levels (Veugelers (2013)).

The rapid expansion of outward FDI to take advantage of lower production costs inspired, not surprisingly, the emergence of 'contract manufacturers' in East Asia, which, against the payment of a modest fee, perform the task of manufacturing the merchandise according to instructions specified by principals such as Apple, Wal-Mart, Sony or Samsung - with the brand of those firms affixed on the goods in question. The large production volumes which such 'contract manufacturers' can produce, as well as their ability to provide flexible responses to the injunctions by the principals (including their insistence on speedy delivery), allow them to submit competitive offers. Provided they can enlist solid clients, they thus avoid the risk of unsuccessful marketing, as the sale of their output is already pre-ordained. Typically, however, their principals want to maintain control of the 'head' (more particularly of their brand) and 'tail' portions of the 'global value chains' (which are discussed in the next subchapter). One may notice that most operations in the 'head' and 'tail' sections of the overall value chains are typically categorized by economists as 'services', although they also bear on physical goods.

The outstanding example of these 'contract manufacturers' is Foxconn, a Taiwanese firm, which supplies electronic goods from its 14 factories in China and elsewhere to Apple and other ICT giants such as Intel, Toshiba or HP. That means that Foxconn supplies multiple customers - which, ironically, may compete intensely amongst each other. Foxconn employs more than one million workers in continental China. Contract manufacturers are not a rare phenomenon, with most of them headquartered in Asian countries, more particularly in Taiwan and Singapore, but shortly also in China. In the terminology of UNCTAD, such arrangements belong to the category of 'non-equity modes of international production'. Such firms nowadays expand the reach of their activities to comprise design or distribution whereby they own the related intellectual property.

One should also underline that a large percentage of trade in goods and services, conducted by MNEs, occur between the parent company and its affiliates abroad. In an estimate of the global gross exports of goods and services in 2010, UNCTAD (2013) put the percentage of internal transactions at 33% of the total gross trade of MNEs, with total trade of MNEs accounting for about 80% of the world's global trade flows. A major vector of those intra-firm flows consist of the final goods transferred to commercial affiliates abroad. Another vector, in vertically-integrated MNEs, consist of intermediate goods transmitted to other members of the group for further elaboration. Furthermore, there are also various internal financial flows (not all of them related to trade transactions) as MNEs tend to pool cash resources in jurisdictions that grant tax gratifications.

Thus, the emergence and the still ongoing spread of multi-nationality, now being joined by ambitious Chinese firms (which have joined the chorus of multinational firms and are positioning themselves in the EU, the US, or elsewhere), have already shaken the traditional outlook on international economic relations. It also follows that a government policy that would only seek, in mercantilist fashion, the maximization of export proceeds, is likely to misfire. One should add that about 60% of global trade is composed of trade in intermediate goods and services for final consumption (UNCTAD, 2013). Hence, there is a need to revamp the analysis of the more traditional canons of trade theory and policies. The exports achieved by a country's domestic firms are often far from measuring accurately the success which that country achieves in a foreign territory. Therefore the sales of its affiliates in that host country should also be encompassed.

The next topic, which sketches another more recent development in international business, adds to the complexity. Thereafter, when reporting on China's impressive entry in the international world in subchapter 3.5, the intimate interlinking of inward FDI with China's export trade (and the largely related flows of imports) will be considered.

3.3 The Fragmentation of Production Processes in Global Value Chains

The preceding overview rested on the inherent assumption that FDI remains conducted within the compass of the same MNE — excepting the last mentioned case of 'contract manufacturers', which involves subcontracting to another, unrelated actor. A real-life look at the international business scene today imposes to transcend that already fairly globalized, and complex picture, and to highlight the rapid expansion of Global Value Chains (GVCs), about which laudable efforts at their statistical registration are now coming on stream.

GVCs - this rapidly acclimatizing acronym is likely to provoke some confusion. In its genuine global dimension, economic value is produced ('added') along all the successive stages of design, fabrication, assembly, marketing and distribution of products or services, up to the final consumer, or another user firm for further elaboration. International dispersion or fragmentation of such economic processes is not at all novel. Consider not only a present-day car manufacturer, and a fortiori Boeing or Airbus, but a modest cotton shirt, whose basic material is grown in a subtropical climate. Admittedly, when looking at the complete production-cum-commercialization sequence, it becomes obvious that the production cost of a given traded product only represents a modest percentage of the overall value chain in internationally-traded goods. Various studies, already Linden and others (2007), estimated that for the (then) Apple iPod MP3 Player out of a retail price of USD 299, only USD 4 was paid to Foxconn for its assembly and testing in China. At the point of exporting from China, however, a wholesale price of USD 183 was declared (and assigned to China's export statistics).

Yet, the expression GVC is nowadays mainly circulated in a stricter sense, as it focuses on the physical products and the services that compose a product which enters the international market after its assembly. Such products tend to contain many inputs that originate in firms located in other jurisdictions, often in the East Asian region. Quite often they are assembled or subjected to a final elaboration in China whence they are sold abroad. Those products frequently contain parts or components which are themselves originating from other countries. The facilities located in different jurisdictions may belong to the same (multinational) enterprise or are operated by virtue of 'horizontal' contractual arrangements between unconnected firms. The links into GVCs can be either forward ones (where a firm in a given country provides inputs to an enterprise in another country for exports from the latter), or backward ones (when the country in question imports inputs that are inserted in its own exports). The role of China for such value chain linkages in both directions has been substantial in recent years (for more details see Banga (2015)).

Thus, the essential feature of internationally-fragmented production is that the very physical final objects that are internationally traded are often composite ones. This means that they contain many intermediary inputs procured by firms from different countries which are able to prove their proficiency in offering a more up-to-date or a cheaper component. Yet, such components, or 'tasks', are also the object of fierce international competition. And, obviously, as such components involve cross-border trade, the market for intermediate goods has grown worldwide, but particularly in East Asia.

3.4. Implications of GVCs for Trade Statistics and Policies

The present-day reality of GVCs and their frequent fragmentation, even if only viewing the manufacturing stage of the exported 'hardware' product, cannot be denied. This also is relevant to trade statistics. Traditional trade statistics concerning gross exports do not reflect which portion of the value added can be attributed to which components and to which firm in which country. Yet, a joint initiative of the OECD and the WTO allows a better understanding of

such trade in 'values added', as it has established a database by linking national 'input-output' or 'inter-industry analysis' with data from bilateral trade flows. This data shows that for China the foreign value added component in final demand stands at around 17%. At first glance, this may appear surprising, considering China's apparently impressive export performance. But the reality is somewhat more nuanced, as will be explained in the next subchapter.

In this connection, it is also worth noticing that GVCs which involve several countries entail some double counting in the statistics about international trade. Consider a good physically exported from China at USD 100 which is attributed to China. If, however, the good contains a major component that was formerly imported from Japan at USD 40, the international trade statistics must also encompass the trade between Japan and China. Aggregate trade statistics then figure USD 140, with the Japanese input double-counted.

Overall, it must be reaffirmed that the excessive attention to the maximization of export earnings, in a traditional mercantilist style, is no longer valid, as it does no longer conform to the structure and dynamics of much of today's globalizing economy. Indeed, if a product which is manufactured in e.g. China is inserted as an intermediate input in a further elaboration process, import duties or anti-dumping levies on such goods would hurt those local processing firms and the latter's' competitive export position.

3.5. The Impressive Growth of China's Export Earnings Call for Qualifications

The phenomenal growth pace of China's GDP since 1980 and the resulting unprecedented improvement in the living standards of hundreds of millions of its citizens is undoubtedly one of the defining events of the last half century.

There is agreement among China observers that this truly impressive surge of exports proceeds since 1980 – when the then paramount leader Deng Xiaoping professed the mantra of 'reform and opening to the outside world'. This has provided a major plank to China's economic growth. In most years, the rise of receipts from export trade has exceeded that of its GDP, i.e. that of its overall economy. In the process, China has negated the general expectation that large countries tend to be less open than small countries – as measured by the percentage of exports and/or imports to GDP. Thus, China is nowadays much more open than India, Brazil, Russia and the US.

The 'opening up' of China was no doubt inspired by the successful rise of exports of Japan and of the 'little tigers' in East Asia, particularly of South Korea and Taiwan, where the previous import substitution strategy has been drastically revamped into an export-led strategy in the 1960s.² This redirection resulted in a steady growth of their export trade, initially focused on labor-intensive goods.

In 2001, the People's Republic of China became a member of the WTO, sixteen years after it had applied and at the cost of extra concessions by the Chinese side, which included being treated as a non-market-economy for 15 years. China's membership of the WTO has significantly accelerated its insertion in the international economy. In the meantime, China had substantially lowered its previously high import duties, which until then played more a fiscal than a protective role, because all handles of international trade policy were directly controlled by the State. Today China's import duties are significantly lower than those of India, Brazil and Russia. The access-

² It is worth mentioning that this turnaround in economic strategy in Taiwan and (South) Korea has been buttressed by innovative economic analyses by an impressive group of economists, such as Gustav Ranis, Anne Krueger, Jagdish Bhagwati and Bela Balassa.

sion to the WTO, which was eagerly pursued by the Chinese leadership, has naturally imparted a strong impetus to the flow of exports from China (and to the direct investments by foreign firms). There is no need and no space to recount this sequence here in detail, but the following statistical indicators about China's trade performance in the two directions of international trade in goods and in the resulting balances show China's impressive performance.

China's External Trade Since the "Opening Strategy": Average Annual Growth Rates (based on import and export values in USD)						
Year	Total Trade	Exports	Imports			
1985–1990	+10.9%	+17.9%	+9.3%			
1991–1995	+19.5%	+19.4%	+20.0%			
1996–2000	+ 11.6%	+11.4%	+12.0%			
2001–2005	+25.0%	+25.5%	+24.6%			
2006-2010	+17.2%	+17.1%	+17.4%			
2011-2014	+9.91%	+10.52%	+9.22%			
Source: National Bureau of Statistics of China						

A few more general points about Chinas export performance are also worth stressing (in Chapter 4 the China-EU relationship is discussed in more detail). In 1985 the overall value of exports from China was already rising perceptibly, largely due to three related factors:

- The first factor stems from the opening of four 'special economic zones', particularly that of Shenzhen, just across the border with Hong Kong, which accorded tax and other advantages to inward FDI. Many other areas in China soon followed, including the eastern side of the Pu river which crosses Shanghai, and where from 1995 high-tech firms came to constitute a first-class cluster.
- The second factor was the readiness of firms from Hong Kong and soon also from Taiwan (which has succeeded in mastering an enviable position in high-tech areas) and from enterprising businessmen in the Chinese 'overseas diaspora' in South East Asian countries to take advantage of the availability of an ample and cheap labor force on the mainland, whence they could successfully export labor-intensive products. Thus, in the 1990's the toy industry was largely moved from Hong Kong across the border to Shenzhen, which was once a poor fishermen's village (see Enright, Scott and Chang, 2005) and which is nowadays a full-grown metropolis that is often hailed as the 'world's capital of electronics'.
- A third factor that has favored the flourishing of exports stems from the fairly flexible attitude of the Chinese leadership, although (as confessed by their erstwhile top managers (see the memoirs of Zhao Ziyang, 2009)) the route which China would follow was not at all clear. Yet, the Chinese leadership has been much more open to inward foreign direct investments than Japan and South Korea which have remained reluctant to accommodate such inflows. Thus, the initial restriction of inward FDI to joint ventures with Chinese counterparts was abandoned in 1986. The foreign affiliates of foreign firms were gratified with a more favorable rate in the corporation tax than the domestic firms until 2008, a fairly unique case in the area of international taxation.

Over the years, the (gross) value of China's exports of goods has been boosted not only by the rise of the quantities exported, but also by a gradual shift in the composition of China's export portfolio. Higher valued goods, amongst them electrical appliances and ICT products, have been substituted for labor-intensive goods, or complemented the latter. UNCTAD (2014) recently stated on its homepage that "China stands out in many ways in the ICT landscape... In 2012, ICT goods made up as much as 27 per cent of China's total merchandise exports...and China remained the world's top exporter of all main categories of ICT goods".

Yet, the gross nominal export data are not a fully reliable metric of the value added by exports to the welfare of a country, say its GDP per capita.³ They must be qualified by three major features of China's international trade patterns.

- First, a large portion of exports (estimated at about half of total exports) from China does not originate from firms that are registered and are located in mainland China. In other words, the 'made in China' label does not equate with 'made by China'. One may thereby not overlook that (the many) firms from Hong Kong, which constitutes a separate customs area, are treated formally as 'foreign' in Chinese eyes and statistics. There also has been a remarkable involvement of Taiwanese firms, despite the often tense political relationship between Taiwan and the People's Republic and the necessity to organize such operations over Hong Kong until quite recently. An official Taiwanese source mentions that 80,000 of the firms operating on the Chinese continent are of Taiwanese origin.
- The second factor which qualifies China's export data is that of China's intensive involvement in global value chains, as has already been mentioned in the previous section. China's role as the giant participant on the East Asian economic scene is a major one, because the final elaboration often occurs within its territory.⁴
- Another relevant qualification of the prima facie overwhelming figure of the gross value of China's exports stems from the international convention to attribute the value of a good, which undergoes successive elaborations before it is effectively exported, to the country where the last-stage processing is conducted. As mentioned previously, some final, labor-intensive arrangements towards an export product, more particularly their assembly, are typically carried out in China. Thus, Taiwanese products are often finalized in the PRC. To the extent such 'final touch' to an exportable product is managed on the Chinese continent, it would be misleading to infer from the gross value of the product that is effectively exported from China that such exports fully represent value adding activities in China itself. This caveat is particularly relevant in the present business world with its wide spread of global value chains, in which the Eastern shores of China have become important hubs.

³ In strict logic, imports are the primary vectors of of welfare of a country as they satisfy needs. Export proceeds allow securing imports.

⁴ As noticed recently (Constantinescu a.O. (2015), the relative role of foreign inputs into China's exports may now be declining, as already suggested by statistical data. 'Processed trade' appears to shrink somewhat, whereas 'ordinary trade' expands. The authors hint that this sequence may point to some impact from the new strategy which wants to replace imports by domestic production.

4. THE ECONOMIC RELATIONS BETWEEN THE EU AND CHINA

4.1. The Relations in General

In 1985, the signing of an 'Agreement on trade and economic cooperation' sealed the renewal of commercial and direct investment deals between the PR China and the EU (then numbering 11 member states). Subsequently, the economic relations and the political dialogues between the two partners have significantly broadened and deepened. High-level dialogues, including annual summit meetings (since 1993), are periodically held. More specialized contacts have been institutionalized in not less than 60 sectorial dialogues, which sometimes result in agreements and cooperative projects.

Recently, the two sides started negotiations on a bilateral direct investment agreement (BIA). Such an ambitious BIA would substantially solidify the overall relationship. It would substitute the slightly differentiated agreements which apply today between China and 27 individual EU member states with one single format. Yet, today the EU-members already extend a quite liberal welcome to incoming FDI, whereas in China access for foreign companies remains subject to authorization and may be disallowed, especially in the services area, which is still substantially restricted. However, recent shifts in China's development strategy herald relaxations of the barriers to entry for foreign firms. In due time, a BIA agreement may pave the way for a Free Trade Agreement (FTA) - which appears to be favored more from the Chinese side.

All in all, the relationship remains positive and reflects the benefits which each side expects from a closer interchange. In contrast to the US, there are no geopolitical frictions between the EU and China. The EU is a large market for Chinese exports and also a source of valued technology, appropriated either by way of licensing or through inward FDI. Conversely, European firms are attracted by the vast potential of outlets for their output and, until recently, by the scope for sourcing labor-intensive goods production.

Yet, the bilateral relationship between the EU - which, as an entity, is vested with responsibility for trade relations and now also for direct investments - is occasionally marred by incidents and misunderstandings. On some topics, as in the dialogue on human rights, on which the EU insists, progress remains meagre. Moreover, in various strata of the EU population the awe for China's rapid surge is mingled with fears that Chinese firms will outperform European ones. This is reflected in an image of China, which, for good and less sound reasons, is far from uniformly positive (Shambaugh, 2013).

The EU is bent upon obtaining easier access for its firms to some Chinese sectors, especially as regards services, such as telecommunications, construction and banking. The EU resents the frequent interventions of Chinese governmental entities, at various levels, in the operations of European firms in China, which induce the latter into perceiving China as a non-level-field player. The prohibition of access to public procurement, a WTO undertaking which China has so far not signed, and the still occurring infringements of intellectual property rights (evidenced by the high proportion of fake goods from China seized at European borders) also draw criticisms.

The Chinese side formulates several complaints about its relations with the EU. The preservation by the EU (equally by the US and Japan) of China's status as a non-market economy (at least until December 2016) and the resulting facilitation of anti-dumping procedures ranks high in the Chinese list of misgivings. This issue is discussed in more depth in subchapter 7 of this paper. The refusal of the EU to export arms to China is also resented. The Chinese leadership is also often dismayed by the complex and incoherent lines of command in the EU-28 institutional setting — although in populous China a rather autocratic government in Beijing may also face obstacles when enforcing its instructions at sub-central levels.

4.2. Bilateral Trade Between the EU and China

Bilateral trade between China and the EU has grown in a fairly steady fashion. In 1978 China and the EU had a bilateral trade volume of only 4 billion, whereas in 2014 EU-28 imports from China reached EUR 302 billion and exports to China EUR 165 billion.

	EU Merchandise Trade with China (in billion EUR)						
	2010	2011	2012	2013	2014		
Imports	284	295	292	280	302		
Exports	114	136	144	148	165		
Trade Balance	-170	-159	-148	-132	-137		
Source: European Commission, DG Trade, "China - Trade Statistics", October 2015							

A look at subcategories of trade in manufacturing reveals that China's exports exceed by far those of the EU with respect to electronic data processing and office equipment, telecom equipment and (although less unequally) integrated circuits. This illustrates that China's export portfolio has decisively diversified into higher-tech products. However, as explained in Chapter 3, the gross trade data hide China's prominent role in the final assembly stage which incorporates a high percentage of imported inputs of parts and components.

The bilateral trade between China and the EU in goods has consistently exhibited a wide imbalance in favor of the Chinese side. This trade deficit tends, at times, to raise criticisms in some European circles, although less than in the US Congress.⁵ China now represents the top origin of merchandise imports to the EU. The PRC is also the EU's second largest export market. In terms of services, the exports by European firms, although still low and hampered by rather stringent restrictions to access to the Chinese market, are larger than those of China to the EU.⁶

Although trade between the EU and China reaches now more than 1 billion EUR every day and may be expected to further develop, the trade relationships between the two partners remain modest when evaluated against worldwide trade. Admittedly, the EU-28 represents the largest import outlet for China-produced goods, but, again, one should not overlook the high coefficient of imported inputs in the registered value of exports from China. Still, EU imports of goods from China represented not more than 18% of the EU-28 total in 2014. And the EU exports to China amounted to only 10% of the total EU-28 exports, slightly more than to Switzerland. The value of exports to the US was almost double of that to China.

4.3. Direct Investment Flows Between the EU and China

The close interaction of international trade with *inward FDI* was already underlined (see Chapter 3). Especially after 1992, China became a magnet in attracting foreign firms. The latter were attracted by the low labor costs in the export-geared manufacturing, but even more by the potentially huge outlets in China's domestic market. China is now recorded as the largest recipient of inward FDI. The share of EU-originating FDI into China, while having grown substantially in

⁵ A myopic look at a bilateral balance is obviously mistaken as the competitive stance of an economy must be inferred from its worldwide trade.

⁶ It is noteworthy that in recent years the Renminbi, the Chinese currency, has enjoyed growing use in trade transactions into or from China. A deeper analysis of this new phenomenon cannot be attempted here the more that new moves are being prepared that will enlarge the role of the Renminbi. A fairly recent analysis of the internationalization of the Chinese currency is given in Plasschaert, 2013.

absolute figures, and nowadays involving almost all major European multinational companies, remains nonetheless rather modest in relative magnitudes. In 2014, it amounted to 16 billion USD, which corresponds to a fairly stable 22% of inward FDI flows into China.⁷ However, statistics about FDI in and from China must be approached with care. The statistics collected by the Chinese authorities are affected by methodological discrepancies and by the somewhat nebulous data of FDI by and through Hong Kong.

While minimal until 2010, the outflows of Chinese FDI funds are now growing impressively and are expected to exceed soon inward FDI flows. Within the EU, Germany and the UK appear to be favorite destinations, respectively in engineering sectors and real estate. Some Chinese firms, such as Huawei (telecommunications), Haier (appliances such as refrigerators), and Lenovo (which has taken over IBM's segment of personal computers) have already carved out an enviable position in international markets. More outward FDI from China can be anticipated as the Chinese authorities now encourage outward FDI as a vector of China's 'go global' strategy. The huge foreign exchange reserves of China allow their firms to have their outward initiatives underpinned by ample financing facilities at home. As regards the EU, Chinese firms are eager to secure patents and brands, so as to enhance their commercial appeal. Acquisitions are the preferred route instead of 'greenfield' direct investments. According to recent data, the US remains the most important destination of outgoing FDI from China. Hong Kong is recorded as an important destination of Chinese FDI, although it often acts as a stop-over. Although officially Chinese FDI appears to enjoy a growing welcome, and is nowadays solicited by a growing number of European or other governments the intended take-over of major domestic firms has sometimes been impeded by authorities in the host country. Besides, outward FDI moves are not assured of success, as they must be navigated in a culturally alien environment.

5. THE ANTI-DUMPING POLICY FRAMEWORK OF THE EU VIS-A-VIS CHINA

The narrative in Chapter 1 has already offered some pointers to the methodologies and the underlying philosophy of the trade defense instruments of the EU. The latter should, nonetheless, be elucidated in their main relevant tenets, so as to allow a proper assessment of the efficiency and the wisdom of the anti-dumping battery of the EU vis-à-vis China.

5.1. The Concept of Dumping

Dumping occurs, according to the WTO Anti-Dumping Agreement (1994), in its Article 2.1 "when [a product] is introduced into the commerce of another country at less than its normal value". The latter is defined as "a price lower than the one prevailing in the exporting market or lower than the cost of production, augmented with a reasonable profit margin". The application of this seemingly logical definition represents an exception to the general rule which forbids discriminatory treatment of imports, i.e. the favoring of domestic producers over their foreign competitors. Yet, unsurprisingly, considering the bewildering heterogeneity of the goods and services that are internationally traded, the application of anti-dumping rules by a growing number of countries is highly complex and entails frequent controversies that lead to litigation at the courts and at the WTO conflict-solving entities.

⁷ In most recent years, the proportion of FDI into the service sectors and the interior provinces is rising.

The investigations and the possible subsequent sanctioning of dumping are conditional upon the proof adduced by the complainant companies in the importing countries that the indicted imports cause 'material damage' to their domestic industry. As compared to the traditional import duties, anti-dumping actions relate usually to particular and minor segments of a more general category of traded goods. Besides, the trade-defense instrument is directed against the imports from one or a few explicitly named exporting countries and firms, whereas import duties have more general applicability.

Apart from anti-dumping measures proper, the WTO rules allow two other trade defense instruments. First, the 'countervailing' or anti-subsidy measures aimed at correcting the impact of subsidies which are granted by the government of the exporting country in various ways (e.g. favorable conditions attached to loans, or the condoning of government loans, etc.) and which cause 'material' damage to the relevant business sector in the importing country. The anti-subsidy weapon has now been unearthed more often in recent years, both in the US and in the EU. It should be noticed that, by their very nature, anti-subsidy actions directly challenge the trade policies of the government of the exporting country, whereas anti-dumping measures relate primarily to the behavior of individual firms, or specific sectors, in the trade-partnered country.

The other third trade defense remedy consists of temporary import duties that counteract imports "in such increased quantities and under such conditions as to cause or threaten serious injury to domestic producers" (Art. 2 of the WTO Agreement on Safeguards). While much less commented upon in the specialized literature than anti-dumping measures, this measure is quite often invoked in a rather roundabout way. As a matter of fact, the rapid rise of the imports of specific subspecies of goods acts as an eye-opener to the afflicted business sections in the importing jurisdiction, thus inducing them to request import-reducing actions from their authorities.

5.2. The Proliferation of Anti-Dumping Measures

Tariffs, i.e. the imposition of a payment at customs on imports from abroad, have traditionally been resorted to by governments as the main instrument for protecting domestic producers against imports. Such levies succeed in drastically curbing the flow of imports, if the domestic demand for the good in question is price-elastic. Quotas, i.e. the interdiction of imports beyond a specified value or quantity, would act even as a more potent instrument of retrenchment from international trade. In this connection, one should notice that the import tariffs, by and large, have traditionally been and still are 'escalated', whereby lower rates are applicable on intermediate products than on final goods. Such escalated system clearly serves the purpose of favoring the growth of domestic industry. This quite prevalent practice of import levies has entailed the sophisticated calculation of so-called 'effective protection' rates, which assesses the protection accorded to domestic value added. Such effective protection can reach very high levels when an economic activity involves modest domestic value added, as for example in the final assembly of durable consumer goods.⁸

⁸ About half a century ago, various authors, particularly Balassa (1971), who have advocated the shift in development strategies towards an export-oriented one, stressed the 'effective protection' dimension of trade policies.

The relevant point in this essay is that in recent decades the importance of import duties has been declining significantly in many countries, especially in the richer industrialized ones, thanks to successive rounds of multilateral tariff negotiations. This reduction took place first in the GATT and after 1995 in the World Trade Organization (WTO), but also on account of unilateral tariff dismantlement in a number of countries, among which China is noteworthy. Tariffs are still markedly higher in emerging economies, but the gaps between advanced and emerging economies have narrowed over time.

Once the worldwide financial crisis took hold, although the international economy has remained more open than could be feared, in several countries protectionist measures have been enacted. They were imposed sometimes as import duties or even as outright import quotas, but were often clothed in subtler forms, amongst them anti-dumping levies. The latter are catalogued as non-tariff barriers (NTB) —although one might argue that they are akin to tariff barriers, as they result in often prohibitive import levies on the (admittedly limited) categories of imports targeted by such 'trade defense measures'.

When China acceded to the WTO in December 2001, its import duties had already been drastically slashed, and were, upon accession, further reduced to an average of 8.9% for industrial products. The entry of China into the WTO has been a lengthy undertaking, having been requested already in 1986. It was conditioned on the acceptance by China of restrictions that were tougher than those requested from other candidate-members, and about which the US acted as a pacemaker (Lardy, 2003). Thus, a 'China-specific safeguard' against imports from China could be imposed on products imported from China during a span of 12 years, whenever (only) 'market disruption' was threatened, whereas the corresponding WTO provision requires a 'serious injury' to domestic industry. Besides, for anti-dumping purposes, until 2016 China would remain treated as a non-market economy, which usually results in a readier conviction of dumping behavior – as elucidated below.

The recent decades have witnessed the rapid spread of anti-dumping (and anti-subsidy) investigations and of their subsequent levies on imports which are meant to correct infringements of fair trade norms and practices, as framed and supervised by the WTO. Throughout the 1980s and the early 1990s, the US and the EU were the heaviest users of anti-dumping actions. Japan was a foremost target of anti-dumping and some other overt protectionist measures (Davis, 2009). Since then, however, other users entered the field and emerging and developing economies now form the majority of users. A recent tally (Blonigen and Prusa, 2015), notices that between 1995 and 2014, the EU was the world's largest user of anti-dumping measures (297 cases) behind India (519) and the US (323). Over the 2007-12 period, India and Brazil resorted more frequently to the anti-dumping weapon than the US or the EU (BKP Report, 2012), although they use higher import duties and stronger other protectionist instruments than is the case in China.

5.3. Evolution and Elements of the EU Anti-Dumping Framework

The first EU-wide legislation in the anti-dumping area was enacted in 1968 (Snyder, 2010). Two basic texts⁹, dated March 1996 and October 1997, undergird the EU anti-dumping battery. The Commission is under the obligation to initiate proceedings when 25% or more of the producers of a (sub-)species of a product lodge indictments about dumping practices by firms in foreign countries. Thereto the complaints must provide evidence of the dumping event, of 'material' injury to the (Union) industry and of a causal link between the dumping practice and the injury.

This basic set of rules has not been much altered. In 2006, a Green Paper, submitted by the then Commissioner Mandelson, contained a proposal to enlarge the definition of the 'Union producer' (and hence entitling to request protection) by encompassing companies which outsource production outside the EU but retain significant operations within the EU (such as product design at the head of the value chain and distribution at the tail end). This would acknowledge the phenomenon of internationally fragmented 'global value chains'. The Mandelson initiative failed to materialize.

In 2010, Commissioner for Trade Karel De Gucht launched an initiative to modernize the Trade Defense Instruments (TDI) arsenal of the EU. Previously, an external consultant, the BKP Development Research and Consulting GmbH of Munich, analyzed the current practices of TDI's in 'peer' countries - namely the US, Canada, Australia, India, China, New Zealand and South Africa - and carried out an economic analysis of the TDI. This study, published in March 2012, while basically supporting the present course of action of the Commission, contained none-theless a number of reservations on actual practices, and even a more fundamental questioning about the deeper rationale of the TDI (which is discussed in Chapter 6).

The steps towards a 'Regulation of the European Parliament and of the Council on the modernization of trade defense instruments', in a co-decision framework, comprised a wide range of consultations of stakeholders, and a workshop and public hearing in the European Parliament in November 2013. At the workshop there was fairly wide consensus on various steps that would render the procedures more transparent. There was also support for more openness about the criteria to assess the 'Union Interest' test. The divergence in views - in fact in interests and in more basic 'philosophies' vis-à-vis international trade - between the representative EU-wide organizations of producers and those of importers in the EU clearly surfaced again at the workshop.

The initial intention to arrive at an amended set of trade defense instruments on the propositions by the Commission and to be adopted not only by the Council but also by the Parliament has run into serious opposition and into a split amongst the member states in the Council. Half of the member states are reported to have rejected the new proposals (Borderlex, June 2014).

The disagreements centered mainly on the proposal of the Commission whereby the 'lesser duty' rule would be abandoned in a rather extensively drawn number of circumstances. The' lesser duty' rule, a long-standing principle adhered to by the EU, holds that the EU levy aims at rectifying the injury, not at penalizing the exporting enterprise and country. Hence, if the injury margin remains below the dumping margin, the former standard should prevail. All in all, the original proposal of the Commission would have hardened the stance of the EU against foreign exporting countries. The De Gucht proposal has also been shelved and, for the time being, no change to the EU rules is being contemplated.

⁹ Council Regulation (EC) n. 184/96 of 22/12/1995 on protection against dumped imports from countries not members of the EDC and Council Regulation (EC) n. 2026/97 of 6/10/1997 on protection against subsidized imports from countries not members of the EC.

Looking at the specific features of the EU anti-dumping arsenal, it can be stated that the EU body of TDI shares many commonalities with that of other countries, as they are all basically embedded in WTO prescriptions. Actions by the US appear to have been inspiring analogous positions of the EU. Yet, there are also some notable differences between the sets of rules in the EU and in the US.

5.4. EU Anti-Dumping Measures against China and the Question of Market Economy Status

In the 2005-10 period covered by the BKP (2012), the EU initiated 68 anti-dumping (and 10 anti-subsidy) investigations. 80 new measures were imposed. 79 expiry reviews led to the extension of measures in 54 cases. Sectorwise, the chemical and metal products were the most targeted. During the same period, anti-dumping actions were aimed predominantly against developing countries, with China representing for over one third of all actions.

In recent years China has become the main target for trade defense measures by the EU, but also by the US. This comes not as a surprise, if one considers the following facts, which have already been alluded to in this essay:

- The startling growth of China's export trade, especially when looking (myopically) at the gross export statistics.
- The bilateral trade, and the current account balance of the EU (and of the US), which have been consistently in deficit vis-à-vis China.
- The perception, somewhat lingering on, that the Chinese economy is still a tightly controlled economy applying the Soviet model of a centrally-managed economy.
- The absence of recognition that China, prodded by the desire to join the WTO, had substantially slashed its maximum ('bounded') and average tariffs. This turnaround was contrasting with the aversion of most developing countries to liberalize their trade (Messerlin and Wang, 2008). Nor was there adequate attention to the more stringent conditions for membership that had been imposed on China, which were mentioned earlier in this paper.
- In such an intellectual climate, the fears of being outcompeted by the imports from China exacerbated the requests for protective measures and the accusation, rightly or wrongly, that exporters in China practiced dumping was more readily raised.

Another important factor, which plays a role when looking at anti-dumping measures applied to imports from China, is the question of the market-status of the Chinese economy, as a whole and (in more restricted circumstances) of individual exporting firms in China. Since their early days, the GATT and the WTO provided for the 'non-market economy' (NME) status. In such a setting, when investigating a suspected dumping behavior, the actual price of the exported product is not compared with that of a like good in the same exporting country, but with that of an 'analogous' market-economy country, at a similar level of development. At its inception, the NME status was justifiably targeted at Soviet-type economic systems (including Mao-China), whose fundamental tenets and their ways of operating, even at the micro-level of individual (state) enterprises, were imposed by the State and its Planning Organization, indeed. A consequence of the NME status is that, whenever the price of the contentious import product is shaped by lower labor costs, dumping can more easily be proven and, accordingly, anti-dumping levies tend to hit more severely. The WTO documents do not specify which parameters characterize a NME status, nor the one's that govern the choice of an analogue comparator. The EU applies a list of countries which are considered as running a non-market economy, amongst them China and Vietnam. It is noteworthy that Russia, which acceded to the WTO in 2012, had been granted market economy status by the EU in 2002.

In its protocol of accession to the WTO, China accepted vis-à-vis the EU (in the footsteps of the US) that Market Economy Status (MES) would be granted 15 years after accession, i.e. in 2016 (apparently automatically, as also stated in the BKP Report). Amongst the countries that still apply the Non-Market Economy Status one lists major developed countries, namely the US, the EU, Japan and Canada, but there is rather wide disparity among their procedures. Hence, in the wording of the BKP, those countries enjoy ample policy space.

To be recognized as a MES, the EU posits that the country in question must satisfy five criteria, namely (i) a low level of government interference with the allocation of resources and decisions by the exporting firms, (ii) no distortions that stem, when privatizing, from their previous centrally planned economy, (iii) a transparent and non-discriminatory company law, (iv) a coherent set of laws on property laws and bankruptcy and (v) exchange rate conversions carried out at market rates.

Requests by China to be accorded MES in 2004 and 2008 were rejected by the EU, which contended that its assessment was a technical exercise for the sole purpose of the trade defense investigations which do not involve a judgment about the general functioning of the Chinese economy – a rather specious turn of logic. Upon a question from the audience at the November 2013 hearing at the European Parliament, the representative of the Trade Commissioner replied that the Commission does not envisage any change in its treatment of the status of China before 2016.

Yet, as from 2001, when China was henceforth viewed as an economy in transition, individual firms in, say China, can request Market Economy Treatment (MET), which is then, in principle, valid for the sector in question. Thereto they must produce the proof that their exports are occurring under market conditions; this would allow them to be subject to lower anti-dumping duties. The five prerequisites to enjoy MET are analogous to those prescribed for the recognition of the country as a MES.

Exporters from countries which belong to the category of non-market economies can also request (most often done concurrently with that for MET) "individual treatment" and be exempted from anti-dumping levy. Private ownership of the shares is here a fundamental condition. This route may be useful for Chinese affiliates of foreign companies, provided that they can freely transfer their profits to their parent.

How these criteria were actually applied will be further commented upon in Chapter 6. As to the procedures, the EU Regulation adds that previous to deciding on the adequacy of the claim by the defendant firm in China, the EU Commission consults its Advisory Committee and gives the opportunity to the (Union's) industry to comment on the enquiry by the Commission.

China has introduced anti-dumping regulations in 1997, ahead of its accession to the WTO. While for most of the period since then China has been cast in the role of a defendant against the large number of procedures targeted at its exports, in most recent years China acts more offensively and initiates itself more actions, some of which have a retaliatory aim, such as a challenge raised against the importation of French wines.

6. A CRITICAL ASSESSMENT OF THE ANTI-DUMPING CASE ON SOLAR PANELS

After assessing some of the background concepts relevant to this complex and potentially explosive conflict between the EU and China, a number of conclusions can be drawn, not only about some often overlooked dimensions of that conflict, but also as regards recommendable policies by the authorities involved. These considerations extend somewhat beyond the particular features of the anti-dumping case at issue and address more general aspects of anti-dumping disputes and specific aspects of the anti-dumping framework of the European Union.

There is no need to rehearse the plea that the implantation of solar and other vectors of renewable energy for the generation of electricity by power stations, but beyond the latter ultimately also for heating purposes by households and for transport modes, is highly advisable, not only for the EU and China but for the whole of mankind. This offhand instills the obvious conclusion that efforts should be joined across borders to pursue such objectives. This calls for forceful endeavors by enterprises and for substantial cooperation between them (and their governments), which includes, in a first stage, accelerated efforts to overcome the technological and logistical problems still underway. This would greatly contribute to winning the vital battle against pollution and detrimental climate change.

The deep crisis of 2010-12 of the photovoltaic (and wind) energies appears to have passed. The initially excessive number of producers has been drastically thinned out and consolidated by market pressures within the private sector itself, and (particularly in China) under injunctions by the authorities. The general expectation is that only a relatively small number of firms of an adequate size will be able to prosper in China and even worldwide.

The present scoreboard displays an undeniable revival in the solar energy field, especially in the US and in China. In the US, the new capacity in solar energy installed in 2014 was 418% larger than in 2009, although still only accounting for 1% of electricity generation. Yet, it is expanding faster than the other energy sources, except for gas (which is scoring a rapid growth of output, thanks to the recently unearthed shale gas deposits). But admittedly these official statistics imply a substantial underestimate, as only solar 'farms' are encompassed without accounting for the thousands of solar panels installed on roofs of buildings.

Boosting renewables would be particularly beneficial for the European Union, which lacks ample deposits of oil and gas. Although targets have been established in the EU up to 2030, the steps to achieve an integrated EU energy market are still inadequate. A fairly ambitious policy blueprint was issued in February 2015 which may hopefully bring about an energy union, at least to the extent possible.

In China in 2014 a further extension of capacity in the solar field was envisaged. Various concurrent factors presage a shining future in China. As a matter of fact:

- The country is confronted with serious environmental problems. Chinese cities are amongst the most polluted in the world and this creates deep anxieties amongst the population. The present upsurge in the installation of renewables reflects the somewhat belated recognition that China faces serious environmental problems, in terms of pollution of air (and water).
- Concurrently, the rapid growth in China further drives the need for energy, despite efforts now underway to improve the efficiency of energy use, which is still low. Almost all conceivable energy sources are called to the rescue. Apart from coal (abundant at home, but dirty), China also expands the capacity in the hydro and the nuclear power segments. Renewables have been accorded a priority ranking in the present Five Year

Plan (2012-16). In absolute terms, China is already the top producer of wind and solar energy - a destiny which China cannot possibly escape in most statistical exercises on account of its immense dimensions.

- While Chinese firms have been successful in exporting solar panels in previous years, thus inducing the anti-dumping reaction in the US and the EU, the solar firms that survived the recent hecatomb will greatly benefit from the new dual policy plank of the government. The latter intends to redirect the solar industry away from exporting towards the domestic market and to covering the entire solar production chain instead of focusing on solar panels only. The thinning out of the number of firms in the solar energy area is another vector of industrial policy. Its aim consists in building up a few solid firms that can perform well in the international arena.
- Financing will be available, largely through the Development Bank of China, for investments in line with the new strategy for solar energy.
- Recently it was stated that private and foreign enterprises will be admitted to invest in the renewables sectors, also as regards the setting up of solar farms, whereas previously their role was circumscribed to the manufacturing of the machinery involved.¹⁰

6.1 The Respective Roles of Governments and Individual Firms

In the world's media, the production and the use of renewable energies tends to be approached usually as a battle between countries, mainly involving the US, the EU and China. This approach, while an unavoidable dimension of any analysis in international trade, is rather myopic, as it tends to belittle the essential role of individual enterprises in international trade and investment. The latter are opposed as competitors but also often cooperate on specific issues. Therefore, one should not overlook that anti-dumping actions are aiming at individual enterprises from a given country, and not directly at the latter.

Governments obviously play an important role as they shape energy policies, including pricing arrangements. Besides, governments (i.e. in the EU the Commission) are also the agencies from which domestic producers solicit the imposition of trade defense instruments against what they view as 'unfair' competition from abroad. And, in geo-political terms, national pride cannot be ruled out in the international arena of energy strategies.

Yet, in Western market economies and in Japan private companies are the driving forces and international rivalry is primarily waged amongst them. In this connection, one must recall that often such firms have already a wide-ranging multinational profile. As will be illustrated below, and contrary to frequent allegations, the relevant decisions that led to a massive invasion of solar panels into Europe in 2008-09 were not the result of a deliberate strategy of the Chinese authorities, but were mainly engineered by a large cohort of non-public firms. Government intervention in this sector in China appears to have remained rather low. Subsidies are an exception, but until recently, the latter have also been overly generously dedicated in many European countries and in the US not only to producers, but even more to installers and end-consumers. To their discharge, one must concede that in a yet untested and immature industry, in which the firms cannot easily assess the chances of success, government support to producers (or end consumers) may be justified in the initial stages.

¹⁰ Most of these points are mentioned in a more technical paper by Zhi Qiang et al. (2014).

6.2. The Inherent Conflict-of-Interest Between Producers and Importers

A striking phenomenon in the subject area of this essay is the frequent clash of economic interests in the home countries between, on one side domestic producers who request protection against allegedly 'unfair' imports, and on the other side the importers of final goods (and behind them, the ultimate consumers) or firms that import intermediates which are incorporated into their final products. The solar energy case bears witness to this almost congenital conflictual configuration.

Such clashes readily emerge when goods can be manufactured more cheaply abroad than in the home country of the complaining producers, even after due allowance for transport and other incidental costs. This naturally seduces importers and other intermediaries to source such goods from cheaper producers abroad. This observation applies to final consumption goods under the unassailable assumption that in today's globalized world competition is very stiff, not only among producers, but also in the commercializing phases of the global value chain. A similar sequence occurs when an EU-positioned firm sources in, say China, 'input goods' that it further inserts for further elaboration towards final saleable products.

Complaints at the European Commission are seldom raised by individual companies, but usually by associations of domestic producers (which may nonetheless have a mixed membership, in that they also comprise importers of goods). Eurofer, the European Confederation of iron and steel industries is a frequent initiator of trade defense actions. Most often coalitions of importers, whether through their associations (such as in the EU 'Euro Commerce' and the 'Foreign Trade Association') or in *ad hoc* coalitions react promptly to the announcement that an anti-dumping levy has been requested by European producers. They urge their authorities - *in casu*, the Commission - not to accommodate such claims. The argument between the two camps often carries shrill tones.

Such conflictual episodes clearly reflect opposite interests. The producers incriminate the loss of sales in their home countries and in the EU, from which they suffer as a result of the cheaper imports from China. In response, the importers underline that they want to source the goods from the most advantageous manufacturing site, so as to best serve their clientele and in the process to enhance their own sales and profits. As documented in Chapter 2, the conflict has flared up in the solar energy cases first in the US and soon afterwards in the EU, and has only been solved (provisionally?) by the August 2013 'understanding'. However, since then the US authorities have re-ignited the tussle with a rather strong indictment and also the EU has become embroiled again with China.

Without embarking on a comprehensive review of anti-dumping cases, a few of the earlier anti-dumping cases are worth mentioning as they display singular facets. The first one refers to the footwear sector, in which an anti-dumping initiative entailed an open clash among member countries of the EU. In October 2006, a definitive anti-dumping levy against imports of some categories of leather footwear from China (and Vietnam) was approved by 9 votes against 12 opposing and 4 abstaining member states. Yet, the anti-dumping levy was maintained, as, according to prevailing rules, abstentions are added to positive votes. The Northern member states opposed the measures, whereas the Southern rim, Spain, Portugal and Italy supported them. Four member states, amongst them the Netherlands and Belgium, abstained. The Northern countries had already largely shed the manufacturing of footwear. Thus, during the 1970's, in the Netherlands and in Belgium, many small family-type manufacturers of footwear were competed away by firms in Spain, Portugal or Italy, forcing them either to outsource such manufacturing themselves or to convert their business into retailing foreign-made shoes (Plasschaert and Cassimon, 1994). In the meantime, even Italian producers, renowned for their knack for high fashion, struggled to survive against the threat of firms from China and Vietnam, or from Romania. There are other cases, in which the defense of the domestic producers was even less well grounded. In 2003, US producers of ladies underwear were granted heavy anti-dumping levies against imports of the like goods from China. Yet, the press at that time reported that the production of ladies underwear in the US had largely become extinct, as US companies had been subcontracting the sewing and knitting handiwork to Honduras, whence the reworked fabrics were channeled back to the US to benefit from a large degree of exemption from import duties (which are levied only on the value added abroad). Thus, the anti-dumping moves decreed in the US did primarily protect value added in the manufacturing stage in Honduras, not in the US itself.

6.3. The Impact of Anti-Dumping Duties on the Competitiveness of Domestic Firms

The ICT sectors, in which electronic devices are not only ancillary inputs in the production process of their own output portfolio - whether toys or sophisticated machinery – but constitute the object-matter of their own business, have become important vectors of international trade, in a vibrant and highly competitive business environment. The parts and components that are comprised in their end products often originate in a plurality of countries, involved in international value-added chains. This is equally the case in the photovoltaic sector. Initially, firms in China that were focusing on the more labor-intensive segment of assembling panels imported silicon from Germany whose firms, such as Solar World and Wacker, had achieved a strong position. Other European firms were also involved in some minor aspects of the production process as with respect to saw thread (e.g. Bekaert, a Belgian firm) or special types of glass (e.g. Rhone Poulenc).

The intrusive role of intermediate digitalized goods, which are incorporated in the manufacturing process and in cross-border trade flows, results in a rather fundamental change in the traditional constellation of international trade. As components, other than raw materials, are embodied in further manufacturing processes abroad, import duties or anti-dumping levies on such components harm the interests of those processors in the importers' countries and injures their competitive resilience in the international market. This new reality in international business, which was discussed in Chapter 3 when referring to the pioneering analyses of the OECD-WTO teams, challenges the traditional, mercantilist addiction in government strategies towards the maximization of export proceeds – an issue to be revisited in the concluding segments of this essay.

6.4. The 'Public Interest' Test in Anti-Dumping Proceedings by the EU

The previously reported anti-dumping cases raise the related query as to what extent the conflicting interests in the same importing countries between the domestic producers and the other stakeholders are taken into account in the trade-defense rules and proceedings. How does the EU regulatory system treat what is called the 'public interest', i.e. giving due recognition to the various parties involved in an anti-dumping case, and not only to the complainant producers in the 'home country'?

In the US and in several other countries no public interest test is prescribed and only the interests of the domestic industry are taken care of. Nor do the WTO rules impose the application of such a 'public interest' test. In the EU, the basic regulations mentioned in Chapter 5 prescribe to heed what is now called the 'Union interest'. The regulations circumscribe the latter as 'all the various interests taken as a whole, including the interests of the domestic industry and users and consumers'. "For the immediate future, the EU is well positioned to address these issues due to the routine application of the Union interest test. [...] Furthermore, the role of interested parties

should be clarified in line with the practice in other parts of the investigations, their main role should be to provide information and comment on the Commission's findings, but the actual analysis of public interest should be reserved for the Commission" (European Parliament, Joint Workshop and Hearing, November 7, 2013, p.71 and 72 respectively).

The Commission has also specified that the Union interest only refers to economic interests. However, in handling actual cases the Commission's officials appear to attach less attention to the interests other than those of the domestic producers, although a passage from the basic EU regulations also states that anti-dumping measures may not be applied where the authorities can 'clearly conclude' that it is not in the Union's interest to apply such measures. Another provision holds that no duty should be imposed when the negative effects on (other) stakeholders are disproportionate in relation to the positive effects on the Union industry (but what is meant by a disproportionate effect is left to the discretion of the Commission).

The dearth of adverse reactions by importers or users is commonly interpreted by the Commission as an admission that the levies envisaged are acceptable. Yet, the 2012 Report by the BKP Development Research and Consulting (Munich), containing the "Evaluation of the European Union's Trade Defence Instruments", appears to vindicate the comparatively rare consideration of the interests of stakeholders, other than the domestic manufacturers. Thus, it states "that the usability of Trade Defense Instruments depends on whose interests are considered under the public interest test and their weighting" (p. 297). But it somewhat paradoxically holds that "... if all economic operators' interests are given the same weight, this would (almost) invariably lead to the non-imposition of measures and would render the TDI regime unusable as an instrument to protect the domestic industry" (p. 207).

Hence, the TDI Report appears to basically approve the privileged consideration of the domestic producers' interests above those of other stakeholders and to approve genuine protectionist stances. It nonetheless contains some critical comments which contradict or, at least qualify, its own overall conclusion. Accordingly, it contains a number of suggestions to improve the TDI methodologies, although such proposals basically relate to procedural matters. The Report also admits that in an increasingly complex economy, the weighing of conflicting interest will become more relevant, but also more laborious. In that connection, it refers repeatedly to international value chains.

All in all, the TDI Report often contains ambiguous materials. Thus, in an overall analysis of the basic rationales of the trade defense arsenal - to which I move below - the aim to protect the domestic industry against new contestants – today, particularly firms located in China, two decades ago those from Japan - into the international marketplace clearly emerges as the major motivation for anti- dumping measures.

In the extensive academic literature devoted to the actual trade defense practices of the EU by specialist economists, the issue of the 'union interests' is often assessed and found deficient in its actual applications.¹¹ These well respected specialist economists overwhelmingly reach the conclusion that the investigations are distorted and biased to the benefit of the complainant domestic producers. In their views the analyses by the EU Commission are enfeebled by several shortcomings. Amongst these they charge that:

¹¹ Without any claim to completeness, let me mention Tharakan, M. (University of Antwerp), Vandenbussche H. (University of Leuven), Blonigen, B. and Pr**us**, T. (London School of Economics), The Kommerskollegium, National Board of Trade (Stockholm).

- (a) The burden of the proof is laid on the critical voices, not on the complainant domestic producers. Thus, within the framework of the Market Economy Treatment (MET) the firms, say in China, that solicit such treatment (which would allow them to no longer be submitted to the non-market economy predicament) must offer proof that they actually function in a market economy setting. The Commission must not prove that this is not the case.
- (b) The Commission enjoys a high degree of administrative discretion.
- (c) When the importers or users do not react in a timely fashion their silence is interpreted as an admission that dumping is practiced (and benefits them).
- (d) In a related fashion, the opponents are allotted only a short lapse of time to withstand the allegations of dumping.

If, beyond those procedural aspects, one looks more closely at the economic argumentation advanced to justify the imposition of an anti-dumping measure, the bias in favor of the domestic producers becomes highly plausible. Thus, a detailed analysis of 32 cases in the 2005-2008 period (Davis, 2009) found evidence of such systematic partiality. In all the cases of that sample, importers or users had expressed their opposition to the intended anti-dumping duties. Yet, the Commission's investigators, without engaging in a deeper analysis, stated persistently that 'the duties are in the Community industry interest' and that 'the Community industry would go out of business if measures are not imposed'. Besides, only in 7 out of 110 cases the Community interest has been retained as a justification for the termination of an anti-dumping duty. The author also criticizes the shallowness of the circumvolutions which are littering the texts of the investigation reports (Davis, 2009).

Another critical remark argues that anti-dumping measures are often ineffective. It thereby points to the tendency of indicted firms to shift their production to jurisdictions that are not targeted by the specific anti-dumping measures. In the increasingly interconnected business world in East Asia such deviation is not too difficult to organize. The basic EU regulation authorizes the EU Commission to extend anti-dumping measures to such cases of 'circumvention'. However, so far, the EU has apparently been shy in extending the geographical reach of anti-dumping measures, which is not devoid of political risk, but the US are just now hitting Taiwan (alongside China) in the resurrected solar energy dispute. Extending the anti-dumping measure to exports from Taiwan is not fully convincing, considering that the American authority should prove that the indicted circumvention was aiming at sidestepping the anti-dumping levy, whereas Taiwan, whose economy is closely interwoven with that of mainland China, has already attained an eminent position in the ICT sector. Besides, with its outspoken free market philosophy, Taiwan cannot be suspected of toying with economic policies that are imposed by the state, as listed in the criteria applied by the US (and the EU) when refusing the market economy treatment to China.¹²

The statement in defense of the EU position that anti-dumping levies only strike a tiny percentage of imports and hence EU firms (which can be driven out of business by the levies) is not fully shared. In fact, in a well-researched paper Vandenbussche and Zanardi (2010) found that, as a result of recently introduced and frequently applied anti-dumping measures, countries like Brazil, India and Mexico experienced a noticeable decline in their import trade, which the authors attribute to spillover impacts of the anti-dumping moves into other sectors.

¹² A recent report of Want China Times, in Taiwan, dated March 16, 2015, mentions several Chinese photovoltaic companies which are setting up operations abroad, partly to sidestep the American (and possibly EU) trade defense measures.

6.5. Market Economy Treatment of Foreign Suppliers

The five conditions that must be satisfied by (a) foreign exporter(s) in a jurisdiction that is still treated as a non-market economy to be accorded 'individualized' market economy treatment (MET) by the EU have been listed in Chapter 5. The TDI Report (p. 289 and following) contains a detailed analysis of their application during the survey period 2005-09. A few major findings are noteworthy:

- 48% of the anti-dumping cases during that period were intended against enterprises in countries to which the EU applies a non-market economy (NME) status. China stands out among these countries and today, following the implosion of the Soviet Union, actually only China and Vietnam are still targeted.
- Out of 141 submissions to obtain MET, only 29 were successful.
- The 'analogue' country, retained as a comparator market economy, was generally the one recommended by the complainant home-country producers. The US and Turkey were most often selected.

The procedures involved in invoking MET and their implementation by the Commission are burdensome.¹³ Moreover, other aspects can be criticized. For example, the Commission apparently does not recoil from twisting the regulations to favor its own position. Thus, in 2012, in the Brossman case, the European Court had held that the Commission should examine all applications for MET, even if the plaintiff company was not included (apparently intentionally) in the sample of applicants which the Commission retains for consideration. The competent European authorities reacted to this judgment by promptly adding an amendment to their regulations which rejected individual examinations as 'unduly burdensome'. The outcome is that "obtaining MET status is next to impossible if a company is outside the sample" (Graafsma and Vermulst, 2015, p. 157). Furthermore, the five official prerequisites that condition the granting of MET, especially the wide-ranging first one, are cast in rather wide terms, which leave much leeway to the Commission for a negative assessment of the MET applicant. And amongst the five conditions, (IV) and (V)¹⁴ are no longer considered relevant and apparently no longer actioned, which again makes it easier for the Commission to come to a negative conclusion.¹⁵

Obviously, in this controversy, a reliable answer to the query about the impact of anti-dumping measures on the different stakeholders would be forthcoming from a rigorous empirical analysis that would compare the (net) 'gains' which the anti-dumping levy conveys to the shielded domestic producers against the 'losses' on the other stakeholders, i.e. mainly on the importers or/and subsequent processors. Various empirical enquiries have been devoted to such analyses, which in essence show that - as is openly conceded in the TDI investigation - the overall welfare-improving impact of lower import prices enjoyed by the numerous consumers and processors exceeds by far the loss in sales and incomes which the domestic producers incur, and which the anti-dumping duties aim to redress.

This leads to the surprising first glance finding that, although it is clearly established that anti-dumping measures are stacked excessively to the benefit of the domestic producers, in actual

¹³ It may be mentioned that the US applies a somewhat similar list of conditions, including a sixth one, which reads: "other factors which the Commerce Department deems appropriate, to qualify for MET". Such treatment is rarely invoked the more that, if granted, the treatment should apply to the whole relevant sector.

¹⁴ (iv) a coherent set of laws on property laws and bankruptcy and (v) exchange rate conversions carried out at market rates.

¹⁵ In the solar energy case, MET was refused to applicants, as only one criterion was assessed as having been fulfilled.

practice the political body and the public at large in the importing country tends to support the anti-dumping actions. To phrase this issue in the jargon of economists: even if it would be shown that the 'producer surplus' (which the anti-dumping measure is meant to preserve) works out significantly below the 'consumer surplus' (gained by the importers, consumers and users/processors due to lower import prices), the public at large is in favor of anti-dumping measures. It is likely to consider the preservation of the wages and profits in the realm of domestic producers as worthy of more attention, and of privileged government support, than the enhancement of the real incomes of the other stakeholders. In the same vein, the public does not visualize that the aggregate purchasing power economized by consumers, thanks to the lower-priced imports, may subsequently be spent on other domestically-produced goods from sectors in which higher wages may be prevailing. Likewise, the very fact which has already been noticed that the higher price which, on account of the anti-dumping duty, a domestic company would have to discharge on imported intermediate input goods may adversely affect the production cost of its own further elaborated products, and hence its competitive stance, is even less perceptible to the general public than the lower price of imported consumer goods.

Thus, in an exhaustive analysis of the shoe industry in Europe and the controversial leather shoe dispute mentioned earlier, the National Board of Trade in Sweden (2007) looked at the value-adding sequence in several European companies. Admittedly, the companies involved in that analysis were already globalized as they had offshored the manufacturing stage proper to China. Whereas there is a tendency in the disputes about relocation to focus exceedingly on the hardware manufacturing in China, the authors duly considered the whole value-added chain, from the pre-manufacturing design stage to that of the post-manufacturing sales up to the final consumer. The remuneration of the manufacturer with its low wages but thin profit margins in China was found to be quite modest, and did generally not exceed 4% of the final sales price. In all cases of the analysis of the shoe sector, the value added within the EU in the pre-manufacturing and the post-manufacturing phases exceeds well above 50% of the value of the end product. In contrast, for the 'pure' EU importer of shoes that would be fully made in China that percentage would still stand at 34%. Understandably, the profit margins which are required in the commercialization stage perform a major role in that 'internationally-fragmented-'distribution-of labor' sequence. All in all, even in fairly simple and labor-intensive sectors such as footwear, the value added at the 'head' and the 'tail' of the production- plus- commercialization sequence is much higher than the cost of manufacturing the final products in the assembly lines, for example in China.

Another Kommerskollegium analysis (2007) looked at the impact of anti-dumping measures on ferro-silicium, imported from China and four other countries. This is a subsector, in which the costs of manufacturing are proportionally higher, and those of commercializing much lower than in the shoe sector. The costs to the EU industry as a whole, to both users and import-competing firms, were found to reach the quadruple of the benefits that the anti-dumping levy would bestow on the tiny protected domestic industrial subsector.

All in all, one cannot avoid the general conclusion that the imposition of anti-dumping duties is most often a handle to provide protection to domestic producers, which, otherwise, might be competed away by the cheaper imports. As stressed by Isakson, also from the Swedish National Board of Trade (2008, p. 108): "Using trade defense in a globalized world is risky; the sheer complexity of the globalized economy makes it uncertain whom a measure may actually hit ... It may instead inflict most of the damage to a European producer".¹⁶

¹⁶ One may also refer to analogous empirical analyses in the unending controversy between the proponents of inter-national free trade (no doubt, the majority of academic economists) and the opposing camp (mainly of policy makers but also trade union leaders and some captains of industry). The virtue of open international trade is gene-

6.6. The Political Dynamics of the Solicitation of Trade Defense Measures

Anti-dumping procedures, and more generally protective instruments, tend to be solicited by import-competing firms that are confronted by foreign competitors. Although the EU regulations take care of disallowing phony requests for protection, one should admit that a domestic government, or, for that matter, the European Commission, faces the laborious task in assessing whether the complainant firm or sector is suffering under transient difficulties, which could possibly be overcome by government assistance, or whether it is fatally diseased. Moreover, if the complainant companies can mobilize a group that represents 25% of the sector concerned, the Commission is obliged to open an anti-dumping enquiry.

An accusing finger is then readily directed against a foreign competitor, indicted of 'unfair' practices - amongst them, that of sales abroad below his production costs - which should indeed be proscribed as genuine dumping. The concept of unfairness has ethical overtones, although it evidently lacks precision and is easily abused. Trade unions, employers' associations and the general public are then readily mobilized to exert pressure on their authorities. And sensible economic considerations make way for politicized, and often nationalistic, reactions.

6.7. Invoked Arguments Against Imports from China

In the at times vehement disputes in the media, or even in statements by EU Commission spokesmen, further arguments against the importation of solar panels or other components were frequently aired.

One argument consisted in stigmatizing the overproduction in China, which induced the domestic producers to redirect their sales to export markets, possibly at dumped prices. This has indeed occurred and ignited the reaction of European producers, and of the European Commission. However, one must remark that, if such a line of reasoning were pursued integrally, it would condemn producers to serve only their domestic market and contradict the very rationale of inter-national trade. In a similar fashion, if put in rather extreme terms, as expressed by Solar World, which complained that the Chinese onslaught was undermining the leading position until then of Germany in the solar energy field, the argument would negate the increments in global economic welfare that derive from a genuine competitive international environment. It is also symptomatic that overproduction often occurs simultaneously in more than one of the world's major regions. This happened in the solar energy sector, as illustrated in Chapter 2, and occurs repeatedly in the steel sector. It is then somewhat incorrect to attribute uniquely the crisis in the European sector to overproduction and dumping practices in China, although the pressure from imports from China into Europe may be a real one. Yet, as reported in Chapter 2, the simultaneous, almost epidemic burst of overproduction in solar energy in the main regions in the world has indeed diverted excess output in China (with its then limited domestic outlets) towards the EU, thus justifying a reaction by the EU.

The other often voiced argument opposing imports from China is the assertion that China is managed as a 'state capitalist' system and that it is accordingly to be treated as a not-yet-market-economy. This argument is equally unconvincing on various grounds. In itself, that expression, although widely used, is rather ambiguous.¹⁷ Capitalism - especially when it is contrasted as a socio-economic system with socialism of Marxist inspiration - stresses the role of individuals and minimizes that of public authorities. In that concept of 'capitalism', the means of produc-

rally acclaimed in its principles, but is eagerly sinned against in the real world.

¹⁷ China's political discourse is rife with such tortuous circumlocutions, such as 'China as a socialist market'. Yet, the adjunction of the expression 'with Chinese characteristics' favors understanding.

tion belong to individual economic agents and are actioned by them for profit. And yet, the word 'state', which characterizes the opposite constellation, is added to 'capitalism'. Besides, the element of 'state' can refer either to the ownership pattern, whereby the state (at central, perhaps also at sub-central level) is the owner of e.g. industrial enterprises, or it can refer to the dominating interference of the public authorities in the management of firms, even if the latter were formally private. Or, perhaps, the 'state' element refers to a dual mixture of state ownership and a string of controls?

6.8. The Market Economy Status Argument

Leaving aside the above need for conceptual clarification, the more relevant question is whether the Chinese economy can today still be considered as a non-private, i.e. a state-owned economy.

A first, highly important observation is that, strictly speaking, the essence of a market economy does not derive from the ownership status of enterprises (private v. public), but whether a firm is managed in its multiple decision areas in conformity with free market mechanisms instead of being strictly regimented by state organs, as was the principled practice in the centrally planned economies of the Soviet regime and of Mao-China.¹⁸ This Soviet-model, which involved the management by planning officials down to the 'micro' enterprise level, has been gradually abandoned in the reform era in China, including its pricing decisions and its financing mechanisms. A return to such model is no longer conceivable in China.

The next element in our query relates to the formal ownership pattern of enterprises. A remarkable feature of the already high level of private enterprises has been that it was not reached by a drastic decision to privatize the state-owned enterprises (SOEs), as happened at the collapse of the Soviet economic system with disastrous results, but by the *de facto* legalization, in terms of ownership and management styles, of other formats than the SOEs. The whole process has proceeded gradually, along various paths and formulas, whereby the word 'privatization' has not even been heralded as a banner.

It would take too long to detail the list of the numerous decisions that moved, the economy towards a market system (see Lardy, 2014, p. 62-82), but a few amongst them are worth mentioning. Already in 1979 the new leadership extended an invitation to the international business world to invest in China. Originally it was only allowed within a joint venture, but that restriction was discarded already in 1986, when wholly-owned affiliates became possible. Private business models were thus introduced in the universe of state-owned-and-directed firms. Second, at times resolute moves were enforced, for example in the 1990s under the leadership of the then premier Zhu Rongji when tens of thousands of weak SOEs were privatized or liquidated. Also, as from 1994, enterprises created by individual families, which hitherto could be operated only as sole proprietorships, could now be transformed into limited liability companies: "only 3 years later, 48% ... were registered as limited liability companies, a share that rose to 65 % by 2004" (Lardy, 2014, p.67). This episode gives strong evidence of a strong entrepreneurial drive in Chinese society.

This subsection devotes some comments to the measures of the Chinese authorities to efficiently endow the enterprises with management modes that are familiar with a market economy which would predominantly be composed of non-state firms. An important step thereto has been the adoption of a Company Law in 1994. The enterprises would no longer be part of bureaucratic ministries, but transformed into corporate vehicles, amongst them limited responsibility compa-

¹⁸ As recorded by Kornai (1992), a few weeks before being demoted, Gorbatchev was still proclaiming the supremacy of the public ownership of the means of production, thus adhering to a sacred Marxist principle.

nies. The state would now act as the sole or principal shareholder, for which a board of directors would be tasked with appointing the managers, whereas specialized organs would exercise oversight over the firms. Such corporatization was also intended to allow the eventual ownership of shares by the broader public. The turnabout of the SOEs has not been a tranquil and clearheaded journey and is today not yet finished, as explained in a moment. Various corporate forms have been allowed or indulged, amongst them hybrids. The purpose was not at all to fully ban public ownership. Influential, leftist sections in the Chinese Communist Party want to maintain control of at least the 'commanding heights' of the economy. In several leading sectors, large SOEs are nurtured to emerge as champions. As Naughton (2007) amply documents, effective privatization by way of insider buyouts by the managers has been widespread, especially in the realms of smaller firms. Therefore, he opines that, although abuses have not been absent, the demotion of state ownership of enterprises in China has not been characterized by the widespread 'management steal-out'¹⁹ that occurred in the former Soviet Union and other East-European countries.

The intention to further deeply reform the SOE sector has been mooted since several years. It has now become a priority objective of government policy in a blueprint for reform in 2013. The underlying motive is that it has become evident that, generally speaking, the SOE sector has been performing less satisfactorily, and scored a lower average return to capital than the rapidly growing private sector. SOEs are also criticized, especially at local levels, for their reticence to reform. The new strategy will highlight a mixed economy, whereby private capital would be involved in SOEs. Besides, through 'capital investment companies', similar to the Temasek model in Singapore, the government would dispose of a handle to optimize the return of the mixed enterprises. The reform also intends to foster competition between firms of different stripes. The thorough reform of the SOE now appears to be firmly put on the rails. Only time will tell what will be its speed.

According to Lardy, "the private sector is now the major driver of China's economic growth" (2014, p. 59). His analysis underlines "the sensible conclusion that private sector firms are significantly more market oriented than their state counterparts" (ibid., p. 121). Lardy looks at which role SOEs still perform in the Chinese economy. A limited number of large SOE are still supervised at the central level by a specialized entity, i.e. the SASAC (State-owned Assets Supervision and Administration Commission). A few of those SOEs enjoy a near-monopoly position as in telecommunications - not unlike entities in Western market economies. There are also still a fair number of firms subjected to controls by sub-central governments. Admittedly, the nomenclature system of appointments in high positions allows much influence by the Chinese Communist Party, which counts now 87 million members. The Chinese leadership is also nurturing some 'national champions' amongst Chinese firms, which they want to upgrade into performing a major role on the world market scene. Besides, it wants to rein in the overproduction in several industrial sectors, which results to some extent from the bank-financed surge in production, which the government has actioned to counteract the negative impact of the worldwide financial crisis on China's growth. While influence by the state and the CCP cannot be denied in what can be termed as a consistent 'industrial policy',²⁰ the fierce competition by firms of different sorts, especially in the realms of consumer goods, streamlines a genuine market economy.

¹⁹ This expression was coined by the late André Leysen, a Belgian businessman, who had a long acquaintance with East Germany.

²⁰ Strong state guidance in the nurturing of the industrial sector has also been a feature of the economic strategy in Japan, South Korea and Taiwan. While failures have occurred, that policy has overall been successful.

6.9. The Overrated Assimilation of 'Market Economy' with 'Private Enterprise

In the perception of trade defense agencies in the EU (and in the US) there has been a clear but overrated tendency to reserve the notion of a market economy exclusively to private enterprise. This is highly debatable, as not the ownership shape but the operational methods of enterprises fundamentally determine their conformity with a market economy. In the span of a quarter of a century, China has been transformed from the Soviet model of a centrally managed economy to a thriving economy, in which enterprises of different types compete fiercely, prices are basically shaped by market demand and supply constellations, and government intervention is low and further decreasing. Even if - *dato non concesso* — private enterprises were to be retained as a strict prerequisite for the recognition of a market economy status, the present stage of China and its projected evolution, even at short distance, foreshadow a further growing role for non-governmental actors. Looking ahead, the decision at the third Plenum of the Central Committee in 2013 for a "reduction of the direct role of the government in the allocation of resources" is bound to further dilute the notion of 'state capitalism', as China's economy further unfolds.

One feature of the Chinese enterprise scene is its variety, as is mentioned in The Economist (September, 12, 2015). Indeed, it is sometimes difficult to identify whether a given firm is private, public or contains shades of mixture. Intervention, even direction by the government, appears not to be correlated with the public character of a firm, but more with the fact whether the firm is seen as being of strategic significance. Party units in firms "are usually pretty benign", but connection with influential persons appears to be availed of usefully in Chinese business. This is the famous 'guanxi', which is widely viewed as a cultural trait of Chinese society.

Moreover, as Lardy rightly remarks, the generally acknowledged rather weak performance of Chinese SOEs (as compared to the private sectors) suggests that such firms are not likely to be capable of outcompeting foreign private firms in international markets, except where, as was the case in labor-intensive sectors, they would benefit from lower production costs.

The preceding string of critical comments on the tendency in a number of Western commentaries of attributing to the Chinese authorities a dominating role in the Chinese economy and of readily equating public ownership with strong government steering of the same companies is found, in the actual situation, to be weakly substantiated. Not only has private business become the main sector of the economy, but a further expanding role of private enterprise is also anticipated and advocated by the government. Moreover, although the government exerts various influences on enterprises, both private and public, especially within a rather systematic industrial policy, one is not justified in positing that the qualification of a number of firms as SOEs would imply that they do not operate in a marketed environment and do not confront competition.

The preceding comments were in more general terms applicable to the overall economy. Yet, the specific topic of this essay deals with solar energy and the related conflict between the EU and China. In the solar energy dispute it was often assumed by the plaintiffs that SOEs and the Chinese authorities were strongly and decisively involved at the Chinese side. This does not conform to reality. The enterprises in China, which have been flooding the European marketplace with solar panels, were almost without exception private firms and certainly not state-owned. This has been quite decisively elucidated in recent research. A few years ago, Cui Yongpin, chair of the energy committee at the Asian Development Bank - which until then had "invested heavily" in new energy projects in China - was interviewed about the "rapid development of China's new energy industries, which everyone has watched with amazement". He stated in this interview: "The whole world wants to know how China got its new energy costs so low … I don't think it's the labor costs advantages … rather it's because so many private firms saw a market opportunity and got involved … also the scale of China's market is something other countries can't emulate" (Xie Dian, 2012).

In his doctoral thesis, Freeman (2015) looked attentively at a wide spectrum of economic and managerial dimensions of half a dozen leading Chinese firms in the solar energy sector which are listed in stock exchanges, such as Trina Solar, Yingli Green, Suntech Power, and inspected their annual reports of the last five years. With one exception (i.e. Tianwei New Energy) they were all private firms (p.56). Other noteworthy findings are that they have not proceeded with the internationalization of their business as deeply as their competitors elsewhere. However, they imported an appreciable dose of silicon, mainly from Germany. The author also states that "Chinese companies believe they have a considerable cost advantage based on large-scale, integrated domestic production" (p.71). Yet, facing limited outlets at home, many amongst the up to 400 firms in the solar market in China re-oriented their output to foreign lands (perhaps at an even lower, potentially dumped, price?) thus igniting the conflict with the EU.

Freeman also inquired into the subsidies which the Chinese solar firms may have enjoyed. Data are far from transparent and comprehensive. The Chinese authorities, often at local level, started to support the solar sector in a rather big way from 2009 (later than the wind energy sector). Renewable energy is one of the new seven strategic industries on which the 12th five year plan (2011-15) focused. The subsidies were varied and bestowed for R&D, manufacturing, installation or power generation. But contrary to what is often stated in Western media, the accounts of the investigated firms do not contain marks of financing by the China Development Bank.

6.10. The Basic Rationale of Anti-Dumping Actions

Do anti-dumping levies always lack justification in terms of solid economic arguments? There is universal condemnation of the practice of 'predatory pricing' whereby foreign producers would temporarily apply lower prices, in order to eliminate domestic competitors. If they would, indeed, succeed in achieving a monopolistic position they could then inflate their prices to highly remunerative levels. While conceivable, it is doubtful that firms or governments are tempted by such deliberate market-conquering strategy or that they could prevail in today's competitive environment. Anyhow, such strategy is not practicable in the solar energy sector with its numerous competitors.

The sudden swell of solar energy exports from China in the EU area has been a further circumstance that has prompted the call for protection against such onslaught. The accusation that China concocted a deliberate stratagem to soon dominate that market worldwide misses substance, as argued in Chapter 2 and in the preceding sections, which recall the confluence of factors that gave rise to a torrent of cheaper exports of solar panels to the EU.

The indictment of competition from abroad misses a basic fact. Provided that, and to the extent that the lower selling price charged by the foreign competitor (when the good in question leaves the borders of the latter) is eventually reflected in a lower price to the consumer in the importing country, or to a firm that uses the imported intermediate good as an input for further processing, the real incomes of the latter recipients in the importing country are rising. These increases easily exceed the losses which the producers in the home countries may incur—as documented above. One may surmise that, as nowadays competition in international trade channels, both wholesale and retail, is very fierce, the pass-through of lower manufacturing cost into the price of final goods is likely to materialize, at least to quite an extent.

The TDI analysis by the BKP raises a fundamental question about the basic rationale(s) of anti-dumping measures. What are the potential roles of trade defense instruments? The report enumerates different ones that may "be present in varying degrees, but are not decisive". It surveys (i) antidumping measures (which are anyhow too modest to act as a macro-economic instrument); (ii) actioned as a retaliatory weapon or (c) as a tool of industrial policy. However, as in the EU approach, anti-dumping moves are pointed at subsets of individual companies; their application would be too limited to exert any impact of substance. The BKP reaches the conclusion that the most important function of TDI is that of defending the economic interests of the EU, which is now confronted with the rapid insertion of China in the international market space. The document distributed at the EU Parliament Workshop in November 2013 put this even more pungently, namely that "the main benefits..." (of the present TDI measures) "are its stand-in role for deficient liberalization insurance instruments, i.e. the majority of TD measures do not protect EU producers against unfair practices but rather against import surges. ...An improved safeguard instrument (or a new instrument ... should be framed in insurance terms with no connotation of 'unfairness'..." (p. 68).

This conclusion of the BKP analysis may not be fully convincing in economic terms, but provides an explanation that fits the facts in an essentially political power game. The avalanche of solar panels out of China into the EU created, indeed, a rather extreme constellation that prompted an acceptable defensive reaction in the EU. Fortunately, the 'understanding' that ensued provided a 'breathing space' to EU producers, without entirely stopping the entry of Chinese products - a mutually acceptable compromise. The anti-dumping duty envisaged for the final duty would have provoked a genuine trade war, considering the large trade volume, although the overproduction was not only occurring in China, but was imbedded in a broader phenomenon, fueled by naïve pervasive optimism about renewable energies.

6.11. Outdated Anti-dumping Rules

The preceding analysis supports the view that the apparatus of anti-dumping in the EU, and in other countries, suffers from serious weaknesses. It may have been adequate to ward off imports that may have been predatory. Its mechanics were also much easier to operate as long as production was handled fully within the same country and international trade was conducted by truly 'national' firms. This is no longer the case. Firms feed their sales abroad largely by production within the host countries themselves. The goods and services that are traded within global value chains are substantially composed of ingredients stemming from various countries. Furthermore, the role of explicit import duties has substantially receded. The still serious obstacles to international trade and investments are now more attributable to divergences in regulatory standards and applications, a point strongly conveyed by Lamy (2013). Free trade agreements, now being actively negotiated, should heed these new objectives of welfare-enhancing trade liberalization— admittedly, an arduous task, but which cannot be sidestepped for long. Finally, the motivations and actual measures vis-à-vis countries that are still considered as not functioning as a market economy, more particularly China, are not convincing as they exude the gist of barely concealed protectionism.

7. THE LAPSE OF THE NON-MARKET ECONOMY STATUS OF CHINA IN DECEMBER 2016

On top of those shortcomings, the EU is faced with another pregnant problem, i.e. whether to grant the status of Market Economy (MES) to China when a section of its WTO Accession Protocol would expire, 15 years after the date of accession.

This clause stipulates that Chinese producers, if they cannot clearly show that they operate under market conditions, can be hit by anti-dumping or/and anti-subsidy levies. To avoid the application of (generally higher) prices practiced in an 'analogue' country, enterprises in China had to prove that they satisfied all five conditions specified in the EU Regulation about the non-market economy status - an indulgence which has been almost systematically denied. The dispute is

already flaring up quite intensely. To only remind a few recent developments: The new Trade Commissioner, Cecilia Malmström, stated at a conference in Brussels in March 2015 that the MES would not be automatically granted in December 2016. She said that she has asked for legal advice on this issue and that the Commission would then take a stand a few months ahead. In the meantime, various but conflicting views have already been voiced by legal experts. Those who oppose the MES argue that individual members of the WTO retain the right to their own interpretation of the legal texts and that China does not yet meet all the five criteria which the EU attaches to the recognition of MES. As an economist, it appears difficult to avoid the conclusion that, on balance, and in fact already a decade ago, China was basically a market economy. One may thereby consider the following reasons:

- (a) During the Mao period, China had adopted the Soviet, centrally- planned economic system, which is the opposite of a free market economy, although Mao-China has not been able to implement that system in the same strict fashion as the Soviet Union. Already, in the early years of the Dengist reforms, since 1980, important elements of a market economy were introduced, specifically (a) the invitation to foreign, private multinational enterprises to invest in China, (b) the de facto privatization of the cultivation of the vast agricultural sector (but not of its ownership), and (c) the blossoming of the so-called Township and Village enterprise, which carried a peculiar mix of actual private initiative and (local) government implication. The overwhelming majority of 'Western' scholars on China agree that, once Premier Zhu Rongi had proceeded with the re-organization and salvation of the banking system and with the drastic thinning-out of the state-owned non-agricultural enterprise sector in the mid-nineties, the economy was fundamentally marketized. This was no doubt valid for the foreign trade sector (which is more directly relevant to our query) in which the shackles of the centrally planned international trade system had been loosened and which became soon a thriving reality, largely thanks to the active involvement of non-Chinese firms.
- (b) Denying the market economy status beyond 2016 would contradict the agreement ('Pacta sunt servanda') in the Accession Protocol. That clause contained a constraint which was imposed by the US, the EU and a few other developed - economy WTO member and the conditions enforced on China were sterner than those on other WTO-candidates.
- There are visible dissensions amongst the 28 EU member states and the economic argu-(c) ments that might sustain the denial of the market-economy status are weak, as argued in this essay. In more recent years, the EU and also the US wield the anti-subsidy weapon to disallow imports from China. This charge does not refer to subsidies that would directly favor export activities, which anyhow are forbidden by the WTO since 1994, but to subsidies for inputs used by producers in China which allow them to compete at lower prices. While the topic of subsidies is not covered at length in this essay, one may wonder whether it could have been operative in the solar energy case-as mentioned earlier. Besides, subsidies are an exceedingly complex topic. In the early stage of a new technology, as in the solar energy case, initial support by governments may be justified. Lardy, looking more generally at subsidies in China, adds that "if government subsidies were a sufficient criterion to label a country's economic system as 'state capitalist', many market economies would qualify" (2014, p. 35). This derisive remark is followed by a lengthy listing of subsidies, in the form of tax gratifications, by the federal and the state governments in the US. Specifically, in the solar energy field, European countries and the US have granted generous support mainly on the consumers' side, but which they were soon forced to curtail.

- (d) In economic terms, and referring to the analysis in this essay, the tendency on the EU side to condition market economy (status) on the predominance of private enterprises is not convincing. Not the ownership pattern, but the ways of operating the firms, as to their decision powers about what to produce, where to secure the inputs, which prices to apply and where to sell are relevant to that question. In China, markets are now mostly free as regards those queries. Competition in most markets is fierce, with domestic and foreign firms (often largely from the Greater China) feeding the rivalry. Private enterprises are on the ascendency and the further reduction of the role of state-owned enterprises is now part of government strategy. The indictment that China is to be characterized as a system of 'state capitalism' projects is a concept that is neither unambiguous nor still applicable to today's China, as competently elucidated by Lardy (2014) and commented upon above.
- (e) The planning system which China practices is now one of indicative planning, whereby the authorities (amongst them the powerful National Development and Reform Commission) forecast the overall allocation of resources and the desired growth of the economy – an exercise which official or university centers routinely undertake in Western countries. The 2011-15 'program outline' (no longer called the 'five-year plan') contains "forecasted" global data which are no longer mandatory. This resembles the planning mechanism instituted in India in the 1950's, and similar governance schemes elsewhere, which, at the most, comprise compulsory allocations only for the public sector. Such indicative planning cannot at all be compared with the Soviet-type command economy, in which the Planning Organization also imposes micro-decisions at the enterprise level. The argument, that has been raised, that the inclusion of renewable energy in the Five Year Plans implies a high degree of support for exports is utterly unfounded, as has been elucidated above.
- (f) Some of the complaints voiced by the Commission are plausibly valid, as the still often weak implementation of new, although often up-to-date drafts of new economic legislation, e.g. with respect to the protection of intellectual property rights. One may nonetheless question whether such issues should be handled by anti-dumping rules. One may also question whether the defects which the Commission still detects in the legal and regulatory frameworks, which have a bearing on trade, are such that they confer an 'unfair' advantage to Chinese enterprises in the international market place. The invocation of the five criteria can easily derail into a purely defensive and protectionist reaction against firms in China that happen to be able to produce more cheaply. The evaluation of China's degree of marketization also runs the risk of applying the test of a somewhat idealized Western market economy.
- (g) In the meantime, since 2009, developments in China, have no doubt allowed further progress in the play of market forces. China withstood the international financial and banking crisis in 2008-11, that devastated the 'Western' economies and entailed the assistance of their governments, even in some cases to the point of their nationalization by their government.

Even if one can understand that public opinions and governments in Europe dislike the shift of economic power on the world scene to mainland (and Greater) China, one is faced with the unmistakable fact that the PR China has become an economic Goliath in an almost incredibly short while, and has reached top rank in the world's economic and political power constellation. One is increasingly led to recognize that, plausibly, in a growing number of economic sectors firms operating in China (amongst them also European ones) will be capable of excelling in world markets. China possesses several trump cards: its firms operate in a vast domestic market, which provides a suitable training ground for enterprises, intent on entering the international market. Besides, at present, China still has a fairly large underemployed but trainable workforce, which can be mobilized for fairly labor-intensive sectors. It is steered by a governmental longterm vision, not depending on the outcome of elections. It has recently built up a well-developed infrastructure in terms of highways, airports and (high speed) railways, and technological upgrading is systematically pursued. Furthermore, China, which is quite adept in assimilating foreign technology, enjoys the advantage of a late-comer in the international market place, enabling it to 'leapfrog' some intermediary stages of development. Thus, wireless telephones have been installed for hundreds of millions of its citizens, thereby sidestepping the cost of setting up the infrastructure for fixed telephones. The tremendous advances which China has scored instill in its population an optimistic view into the future. Rightly, The Economist, in its March, 14, 2015 issue, warns against "a persistent myth about Chinese manufacturing ... (that) the country is only good for assembly, with the more profitable parts of the operation, such as design and marketing, remaining in the West and Japan" (p. 61). China is also enhancing its role in the manufacturing of the intermediates that enter into the final goods sold in the world. The same newspaper does not hesitate to state that "the future of Chinese manufacturing, and of Factory Asia, more generally, is bright" (ibid.).

One should add that the perception of China by the broader European populations is quite often badly distorted. This is to an extent unavoidable, considering the deep cultural cleavages between China and Europe and the lack of familiarity with China's recent history. There is obviously a widespread tendency to judge China with the values and even the prejudices of ones own system and traditional views. Such zones of incomprehension and bias naturally also inhere in the Chinese perception of Europe and even of the EU construction, whose basic principles are generally appreciated in China but whose complexities understandably render the relationship with Europe rather laborious.

8. THE FUTURE OF THE EU SYSTEM OF TRADE DEFENSE INSTRUMENTS

Turning to the present TDI arsenal of the EU and its future, some relevant questions readily arise, which may suggest, if not ready-made formulas, at least some paths to arrive at more satisfactory arrangements between the various stakeholders. This would be beneficial particularly concerning the dispute between the EU and China, in order to avoid trade wars and readily emerging misunderstandings.

- (e) If, in 2016 the EU decides to grant market economy status to China, a major irritant in the trade and overall relations between the two would be formally extirpated. Henceforth, firms in China would be judged as regards dumping indictments, under reference to the prices practiced in their own market. It would then be more difficult to get accusations of unacceptable pricing (often called 'unfair', as is the usual terminology in the US) vindicated by the Commission. Yet, the scope for trade-related conflicts is not likely to be completely sidelined by such a solution (as reminded in a moment).
- (f) Looking at an alternative outcome in December 2016, i.e. that of a continuation of the present trade defense arsenal, one may ask whether it would be efficient, and politically wise, to further operate it in its present shape and with the same contents. This would, anyhow, be the only possibility before long, as again the initiative to modernize the TDI has failed. It is noteworthy that although the BTK Report basically vindicated the EU policies, which it esteems well balanced, it proceeds by mentioning three major weaknesses of the present system. The first one is that while the present TDI rules were designed for national production systems, where the value of the end product was

essentially created within the same (exporting) country, today, in their present format, they are unable to satisfactorily deal with the widespread internationally-fragmented global value chains. As a consequence, the present rules involve discrimination to the detriment of the jurisdiction where the last stage of the value process occurs and where for purposes of customs valuation and tariff classification a definitive character is affixed to a good²¹. The second shortcoming of the present system is that of its comparatively slow rhythm of procedures in rapidly evolving world markets. The third deficiency mentioned in the Report is that of the growing threat of retaliation, as a number of emerging countries, not the least China, are now sharpening their own trade defense weapons.

- (g) No doubt, dumping practices are often invoked to justify protectionist positions which are sometimes leniently accommodated and accorded preference over other stakeholders. Cases of unquestionable dumping, say exporting at prices below production costs, can no doubt be detected within China, with its already highly diversified spectrum of companies engaged in export and they are likely to occur also in the future. But, under the hypothesis that China was granted MES, such violations of international trade conventions, could still be questioned by the EU trade authority, within the WTO set of rules. Yet, as suggested in the TDK Report, one alternative that may still be acceptable to China would consist in adopting the system which was applied in Australia. In that system the market economy status of China is recognized while reserving the right to intervene with anti-dumping measures in case of a 'particular market situation, where domestic Chinese prices may be distorted'. A similar approach was practiced not long ago in Canada, which has not (yet) accorded MES to China, but which applies market treatment as the default in the trade area. Canada has retained the latitude to apply non-market treatment in particular cases. While such exception to the MES may be defensible, it is only warranted-and will only be acceptable to the Chinese side - if it is operated in both directions and is circumscribed to well specified and limitative cases.
- (h) The solution in the solar energy conflict, resulting in the compromise 'understanding' is worthy of more attention. It addressed a real problem, namely that of a flood of imports from China. This solution accords with WTO rules and it is much less complex than anti-dumping procedures, although it almost unavoidably confronts two governments. The threat of an impending overflow of imports can be inferred from trade statistics, although the impact of outward foreign direct investments to the outlets conquered in the partner country should, in strict economic logic, also be taken into account. One risk attached to this solution is that it might unduly freeze existing trade patterns and the quantities exchanged. Therefore, any agreement about trade flows should leave sufficient leeway to allow dynamic forces to expand in foreign markets and thereby to enhance the overall welfare in the countries concerned.
- (i) The EU and China are presently engaged in the negotiation of a bilateral investment agreement (BIA), which is rumored to proceed satisfactorily. This is in itself encouraging, although the structural differences between the EU and Chinese economies are still numerous and substantial. A hopefully common political will may prove capable of overcoming the obstacles. BIAs have traditionally tended to remain shallow and to devote much attention to ways of solving conflicts between the investing company and the host country government. In recent years, however, BIAs have typically expanded their remit and tend to consider a number of other aspects, such as a modicum of BIT-compatible social legislation, intellectual property protection, even environmental

²¹ Thanks to the frequent assembly in the last stage, China is often earmarked formally as the exporting country.

concerns. The present negotiations provide a propitious platform to work towards a more harmonious relationship. They would allow to review the present anti-dumping dispositions, and to discard the controversial non-MES status. Instead of stubbornly clinging to the status-quo in the anti-dumping regulations, the entities in the EU which now advocate the continuation of the present anti-dumping arsenal would be better inspired to request as a *quid pro quo* progress in such areas as intellectual property rights or the retrenchment by some Chinese authorities to apply local content coefficients.

- (j) While some Chinese firms are already capturing leading positions in international markets, thus threatening the traditional prominence of Western firms, the unmistakable truth remains that international trade and investments do not occur in a zero-sum constellation. The higher incomes which country A can earn by way of successful exports to B or C allow that country to order and to import goods from B or C. Indeed, purely defensive and protectionist reactions are at best a stop-gap, with no future. Further international integration, including that between China and the EU, is therefore a major avenue to enhance welfare in the world.
- (k) Last, but not least, in various fields, but prominently in the energy field, China and the EU have a common interest - as does the rest of the world - to speed up the advent of renewable energies. The episode of the solar energy conflict, which was fortunately defused at the last moment (temporarily, anyhow) has evidenced that companies of China and the EU have become engaged in fierce competition, thus providing a stimulus to dynamism in the sectors of renewable energies. But within such wide competitive framework, there exist many openings for fruitful cooperation beyond borders. Already many years ago, the EU and China have entered into a sectorial dialogue about energy. Perhaps this explains why even at the climax of the anti-dumping case about solar energy the two sides still had not interrupted their contacts, thus facilitating a reasonable solution to a major dispute. A constructive dialogue and steps to improve cooperation in this vital area of public policy would allow turning the China - EU strategic partnership into a worthwhile reality instead of being tossed around as a loose slogan. And such a dialogue would contribute to a 'sunny brave new world' (even taken literally), which would revolutionize the provision of energy for the world and which, in the wake of the Paris Conference, may no longer remain an illusionary 'fata morgana'.

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