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Friedrich List and Dutch Disease: two sides of the same coin?

Friedrich List e a doença holandesa: dois lados da mesma moeda?

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RESUMO: Comparando o problema de desenvolvimento de List com a doença holandesa, como generalizado por Bresser-Pereira, vemos algumas semelhanças. Embora a taxa de câmbio não tenha sido compreensível para List, ela é, entretanto, uma, se não a mais importante, determinante dos fluxos comerciais. Essa abordagem generalizada da doença holandesa é uma contribuição valiosa para o debate sobre políticas econômicas apropriadas nos países do Sul. Ela mostra uma maneira de combater desenvolvimentos ruins. Certamente merece mais discussão porque muitos países sofrem com isso. Os argumentos de Bresser se encaixam muito bem em outras abordagens não ortodoxas que também tentaram combater a ineficiência de mercados realmente existentes com propostas viáveis, que a ortodoxia suprimiu com sucesso. Esse artigo também faz uma proposta que possa ajudar países agro-exportadores.
PALAVRAS-CHAVE: Doença holandesa; List; indústria infante; abordagens não ortodoxas; taxa de câmbio.

ABSTRACT: Comparing List's development problem to Dutch Disease, as generalized by Bresser-Pereira, one sees quite a few similarities. While the exchange rate was understandably of no concern to List, it is meanwhile one if not the most important determinant of trade flows. This generalized Dutch Disease approach is a valuable contribution to the debate on appropriate economic policies in Southern countries. It shows a way to counter maldevelopments. It certainly deserves further discussion because quite a few countries suffer from it. Bresser's arguments fit very well into other unorthodox approaches that also tried to counter the inefficiency of really existing markets with workable proposals, which orthodoxy has quite successfully supressed. This paper also makes a proposal that might help for agro-exporting countries.
KEYWORDS: Dutch Disease; List; infant industry; unorthodox approaches; exchange rate.
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INTRODUCTION

Friedrich List's name is inextricably linked to the so-called infant industry argument demanding protection for nascent and therefore not yet fully internationally competitive industries in order to allow them to develop their real production potential. By the way, his own, original name (in German) describes List's thinking much better: *Erziehungszoll* means a tariff levied in order to "educate" nascent industries to become internationally competitive. Obviously, this does not mean unqualified protection, but protecting until these industries become competitive or have clearly shown that they will never become competitive. In this case there is no more need or reason for "education", and protection must logically stop. Once internationally competitive, Germany (the country List considered in particular) should be in favour of free markets. Now economically strong, the country should use its strength against other countries. Thus, List was in his heart a free-trader – if and only if free trade benefitted Germany. This is a very modern and conventional view. The North is Listian in that sense.

Historically, all successfully developing economies, most notably nowadays developed economies, have followed List's advice and protected new – baby or infant – industries against foreign competition. Once on top, these countries usually engaged in *Kicking Away the Ladder* (Chang 2002) in order to avoid that the place at the very top might become too crowded. List himself took his ideas from economic policies followed in the US in those days. Now the US has turned an ardent "free trader" protecting its own economy illegally. In List's thoughts such illegal protection would be unnecessary. One does not need to protect the world boxing champion against a light flyweight champion – the heavyweight and world champion will solve any problems immediately. Reality, of course, differs – as so often in economics. Would be heavyweight champions need protection as far as mostly Northern politicians are concerned to protect them from being knocked out by 40 plus kilo guys. Fairness above all.

The concept of Dutch Disease is younger than List's deliberations. In the 1960s, after huge reserves of petroleum gas had been found, export surpluses due to this one commodity pushed up the exchange rate to the extent that the international competitiveness of other Dutch exports suffered enormously. In extreme cases Dutch Disease can practically preclude any other exports however productively produced because of currency overvaluation. Thus a diversified economy may eventually turn into an economy more or less dependent on one (or very few) export(s). The development of underdevelopment – to use Frank's (1966) famous expression – would result. It is of interest to note that this phenomenon was not noticed in the many cases of developing countries before – only after a developed economy became a victim of "Dutch" disease.

In his work on New Developmentalism, a school of thought he founded, Bresser-Pereira (2008) connects List's infant industry protection and Dutch Disease, drawing attention to similarities. In his paper summing up the principles of New Developmentalism, he stresses the need to neutralise the effects of Dutch Disease

(e.g., Bresser-Pereira 2019). This is a very stimulating approach deserving broad discussion. Therefore, this paper is going to explore similarities and differences between these two concepts. It also endeavours to figure out what List would have advised in the case of Dutch Disease.

LIST AND DEVELOPMENT

Defending Germany's budding industrial development against the new and ruling "English philosophy" of free trade as the best possible solution for all countries, List saw this approach as harmful to Germany's economic development. In his view countries should develop from mostly agrarian economies first to countries with strong industrial production and in the end to well balanced economies with agrarian, industrial and service sectors. Of course, service sector in his days must not be understood as being as large as it is nowadays. One may well assume that no one in the first half of the 19th century would have foreseen the phenomenal growth of services in modern economies.

As List's advice is often contrasted with the ruling free trade theory, it seems necessary to check briefly whether List and Heckscher-Ohlin are really opposing theories as most economists claim or even believe. Extremely few economists do not think so. Long research has only produced two somewhat better known economists doubting this contradiction. The first thought Heckscher-Ohlin as well as comparative costs actually unable to describe foreign trade in the real world:

> The obstinate conservatism with which the classical comparative cost thinking has been retained in theory as something more than a pedagogical introduction – or a model for the treatment of a few special problems – is evidence that, even today, there is in many quarters an insufficient understanding of this fundamental fact.
>
> It follows that not only the comparative cost model but also the factor proportions model can only be applied in special cases and used as a general introduction to illuminate the character of trade in some essential aspects [...] It is characteristic of the developing countries that a good many factors do not exist at all and that the quality of others differs from factors in the industrialized countries. This means that a simple method of analysis – such as the factor proportions model – which does not take this into account is to some extent unrealistic (Ohlin, 1967, pp.308f, stress i.o.).

In defence of this colleague, who obviously did not understand Heckscher-Ohlin theory as well as virtually all other economists, most notably at International Financial Institutions, it might be said that generalizing the comparative advantages theorem and Heckscher-Ohlin is not possible. Really existing worlds with two goods, two countries, and two factors of production are relatively scarce. Regarding comparative

advantages, it should also be pointed out again, that Graham (1923) already proved in the 1920s that specializing according to this theorem could lead to impoverishment and underdevelopment of one country if one rejects the unrealistic assumption of constant returns to scale – something no entrepreneur (outside the looney bin) has ever been known to believe in. A would-be science that demands religious fervour for approaches that have already been proved unrealistic, decided simply to "forget" the so-called Graham Paradoxon after attempts to disprove it failed miserably (cf. Raffer 1994). It is simply no longer mentioned in orthodox literature, and of course not taught to students in order not to make them doubt orthodox trade theory and policies. The academic economic earth remains flat.

It is important to point this out because if orthodox economists were right, any form of protection – as advised by List in order to develop or by Bresser-Pereira against Dutch Disease, as discussed further below – would simply be injudicious and misled. So would be Ohlin's remark cited above. But as both theory and history prove, judicious protection is a necessary condition for development. Of course, silly politics render silly results. This also goes for silly protectionist policies – protectionism as such is not a sufficient condition. It can be implemented in a wrong way. Unimpressed by this, orthodox economists enjoy a huge advantage vis-à-vis the Holy Inquisition: the latter could finally not suppress the view that the earth might after all not be flat, while orthodox economists have succeeded. Lucky Gallilei (and lucky mankind) not having to oppose economic orthodoxy, thus escaping the pyre and meanwhile being able to oppose the once well-established theory that the earth is flat.

The second economist quite obviously equally inexperienced in orthodox Heckscher-Ohlin theory stated that it was "in full accordance with List's point of view, since his criticism of the 'school' was directed only at the dynamic factors" (Heckscher 1950, p.275, stress added). List (1920, p.23) concurred fully and absolutely with Eli Heckscher. As any mathematician knows – and orthodox economists with the urge to disguise as mathematicians should know, but are not allowed to admit – these two optima need not be the same and they usually are not.

Finally, a short remark on actual, historical policies: all presently developed countries – most clearly the US, where List got his ideas from and which fought a civil war in order to be able to impose high tariffs (later presented as a fight to free poor slaves) – applied Listian policies fully (or rather Hamiltonian policies in the case of the US, as Alexander Hamilton was the first to advise such policies, stimulating List's thinking). During his campaign one of Lincoln's slogans was "Vote yourself a farm. Vote yourself a tariff" (Cone 2008, p.65). It was most definitely not "Free yourself a slave" as the US has disingenuously but quite successfully wanted the world to believe. Lincoln only signed the final Emancipation Proclamation, which declared "that all persons held as slaves" within the rebel states "are, and henceforward shall be free" on 1 January 1863, because the Confederation had not surrendered after the Union had threatened to do just that. If they had surrendered, slavery would not have been abolished, but high tariffs would immediately have bn introduced. Also, immediately black regiments were established, much worse paid than white soldiers and led by white officers, cheap cannon fodder to fight for

the Union. Vote yourself a farm meant de facto kill yourself an Indian to get his land. US protectionism has always included preaching free trade once they themselves had reached the top of the ladder. Naturally, they do not themselves apply free trade as inter alia their behaviour in the WTO shows (cf. e.g., Raffer 2019). But the US has been very successful as regards lies on slavery and abolition – successful on fake news as one present US president would proudly say. Here all this is only important to show that protectionism was the real cause of the war – an option the US nowadays denigrates whenever other countries choose it without going to war.

Presenting List's thoughts, one must not fail to mention his view on what is nowadays called the South or underdeveloped countries, the countries where Dutch disease occurs quite frequently. List (1920, p.211) limited development to the North, advocating joint exploitation of the South as "promising much richer and more certain fruits than the mutual enmity of war and trade regulations". In other words, no development prospects for Brazil and other Southern countries.

List referred without much elegance (and failing to be politically perfectly correct) to people in the South as "barbarian and half-barbarian [...] peoples" (ibid.) or as savage and barbarous tribes. The present strong intrusion into Southern economies by international organisations, most prominently the Bretton Woods institutions, the tilted playing field at the WTO (Raffer 2019; Raffer & Singer 2001, pp.197ff), as well as the policy of kicking away the ladder (Chang 2002, who quotes List) can thus be interpreted as following List's advice. Some 180 years ago Lists already advocated this form of neo-colonial rule. In many countries the Bretton Woods institutions de facto already govern the country. This new form of dominance should thus be called neo-Listian (Raffer 1987, 2000). From a Listian perspective of gaining control – or Rodrik's (1996) interpretation of the debt crisis as an opportunity seized to enforce certain policies – International Financial Institutions have been successful. Their "debt management" caused substantial social costs to debtor economies, particularly to vulnerable groups, and economic losses. In addition it violated human rights (cf. the chapters on debtor countries in Bohoslavsky & Raffer eds. 2017). But conquests and taking control can hardly occur without some "collateral damage".

However, List's pejorative remarks on the South do not affect the correctness of the policies he proposed. One only need propagate them to anyone, even against List's intentions also to "barbarous tribes". Quite a few Southern countries have followed policies to protect their nascent industries and have been able to develop enormously, be these policies based on List or other unorthodox theories. This should not be misinterpreted as defence for any import substituting policies that have been implemented. Some of them were wrongly conceived and implemented – a disaster rather than success. Nevertheless, countries climbing up the ladder in spite of all hindrances – South Korea, Taiwan, or Brazil stand out – were all successful because they intervened in what is dishonestly called the free market even though world markets are anything but free.

One should not fail to note that protecting against world "markets" or rather a trade system masquerading as free trade and a market was advised by many heterodox approaches. One main advice of the now nearly forgotten dependendistas

(for their theories Kay 1989 is an excellent source; for a brief summary on dependency thoughts v. Palma 1989; on the unexplainable disappearance of dependency theories while the South became even more dependent, mainly due to debt crises v. Raffer 2000) was delinking from the so-called world market (or system) in order to be able to develop. While there existed many diverging approaches and one may discuss whether one should therefore speak of a school, all dependendistas saw the main problem in the unfair way in which the South has been integrated into the world economy and continues to be treated. While some saw limited possibilities to develop others denied any such possibility – a clear sign of how diverse dependency thinking was. Virtually all advocated reducing or even cutting ties with the North and self-reliance of Southern countries, or at least selective decoupling from the Northern dominated world economy. For small countries collective self-reliance, i.e., grouping together in order to be able to do what big countries such as China, India or Brazil could do alone, was advised. After the increased self-consciousness of the South had culminated in their demand for a New International Economic Order at the UN, dependency approaches simply and inexplicably faded away.

Especially oil rich countries were able to obtain a fairly high level of living by relying on what is under their soils. This proves that one can live well while suffering Dutch Disease. And being dependent. But once the one source of income is either depleted or new technologies make it obsolete the country inevitably falls back into poverty. Therefore, virtually all oil rich countries try to diversify, admittedly a difficult task under circumstances. There really exists a resource curse. Meanwhile virtually all oil-exporters try to hedge against the future by building up oil-funds, money invested to be used when crude export income declines. Kuwait was the first country to do so. As early as 1960 Kuwait established its General Reserve Fund, and in 1976 the Reserve Fund for Future Generations (RFFG). Virtually all oil exporters followed Kuwait's example of sterilising export revenues. This innovative decision was later not only copied by several OPEC exporters, but also by Norway. Norway changed her former "oil fund" (petroleumsfondet) to a "pension fund" (Statens pensjonsfond – Utland), which indicates a clear social orientation, although this fund is also to work as a buffer against volatility in oil revenues and to shield domestic policies against external shocks (on oil funds cf.. Raffer 2007, pp.25f). Meanwhile Norway's fund is much better known than any oil-fund of a Southern country. Pure happenstance that it is a Northern fund.

SIMILARITIES BETWEEN INFANT INDUSTRY PROTECTION AND DUTCH DISEASE

Fighting to protect nascent industries is very similar to fighting Dutch Disease. In both cases domestic sectors are under attack from without, be it because they cannot develop due to external impacts detrimental to building a diversified economy or because already existing production capacities are stymied from developing or are outright destroyed. If Dutch Disease occurred in a country without any

noticeable modern or export industries other that the disease causing sector, List's infant industry protection and protection against Dutch Disease are equivalent. In the Listian case this negative effect is manufactured exports by advanced countries that can be sold at prices clearly under any imaginable domestic prices, nowadays not too seldom even supported by export subsidies legalised by the WTO. One should not fail to note that the WTO allows OECD countries to subsidise exports according to their own Guidelines for Officially Supported Export Credits stipulating minimum interest rates for exports to the South differentiated by country groups and currencies. Under the WTO Southern Countries can finance according to these conditions as well, but to what extent countries can actually do so is a financial question. As Southern Countries are not as rich as OECD countries, and many are overindebted, their financial possibilities are more limited than those of Industrialised Countries. A solution in line with the free market principle of the WTO would have been to outlaw all export subsidies (cf. Raffer & Singer 2001, pp.203f). But this would have changed price relations in favour of Southern exporters – no doubt also hurting quite a few net-food importers in the South, especially so as support promised when negotiating the WTO system as well as stipulated in the Agreement on Agriculture in order to make net food importing Southern countries sign these treaties was refused once the WTO treaties had been signed. Unlike the Mafia, the North did not keep promises and fulfil obligations. There is an understandable reason why the North has never been called the honourable society. Naturally, amble possibilities to subsidize for the North are part of the Agreement on Agriculture. Preaching the free market is so much different from applying it.

People with long experience in producing can clearly offer their products at lower prices than firms still learning how to organise production. If they export to a developing country this hinders domestic industries to develop. In List's time the gold standard ruled. It limited exchange rate fluctuations, which could only occur between the two gold points. Thus the Listian problem was purely a problem of proficiency and dexterity acquired by starting earlier and therefore being in business longer. The exchange rate was of no concern. However, price advantages due to earlier learning by doing or exchange rates have the same effects and are not that dissimilar.

One should point out that traditional textbook trade theory is still a theory without exchange rates and their volatility. Understandably so, as exchange rate changes can destroy any form of specialisation optimal under textbook trade theory (cf. Raffer 2015). Like Graham's Paradoxon such results are supressed. Unlike to the Holy Inquisition meanwhile agreeing that the earth may not be flat and might move around the sun, the earth still remains flat and does not move as far ruling orthodoxy is concerned.

In the Dutch Disease case, it is the increase in the exchange rate that makes exports by any other than the sector (or sectors) causing the disease difficult, unprofitable, even impossible. Imports are cheapened and put undue pressure on domestic firms producing such goods. Unlike in List's case a highly profitable industry can be destroyed because of the appreciation of the currency, an appreciation impossible under the gold standard. Unfortunately, textbook theories still do not

put proper attention to exchange rate fluctuations and their effects – presumably so as this would destroy textbook trade theory.

In both cases – with or without gold standard – prices are the key. While they result from higher productivity due to learning by doing in List's case, they result from overvalued exchange rates in Dutch Disease cases. In both cases prices result from unevenness of development or resource endowments. In a way it is therefore the same market imperfection, even though there are differences regarding causes and details.

List basically had then underdeveloped Germany in mind, threatened by England's economic predominance earned as the early starter and due to robbing so-called "Spanish gold" robbed and extorted by the Spaniards in`Latin America (regarding the importance of colonial pillage for Europe's development cf. Keynes 1965, pp.151ff). Naturally, List does not mention this pillage.

Corden and Neary (1982) and Corden (1984) first formalised this concept in a three-sector model and popularised it. Bresser-Pereira (2017, p.2) defined Dutch Disease as

> the long-term overvaluation of the national currency that originates from the exports of commodities that, benefiting from abundant and cheap natural resource, are also a source of Ricardian rents, and, for that reason, they may be exported at a substantially more appreciated exchange rate than the one that the companies producing tradable non-commodity goods require to be competitive, although they utilize technology in the world state of the art.

This very general definition is valid for any commodities, even though people are normally inclined to think of the oil sector or at least extractive industries when Dutch Disease is mentioned. The concept is expanded – rightly so, as the problem is not confined to some few commodities. As main oil exporters prove, diversifying away from the resource bonanza is extremely difficult (for examples cf. Raffer 2007). It is not easier for other commodities that usually are not as tightly government controlled as the oil (or gas) sector has always been, e.g., soja.

Dutch Disease may naturally also occur in other parts of primary production. Thus, the concept must be generalised. Drawing attention to this fact Bresser-Pereira (2018, p.1) concludes: "To industrialize and make catch up many developing countries must overcome or neutralize a major economic disadvantage, the Dutch disease, which is present in most Latin American and African countries, and with less severity, in the other continents." Generalising Dutch Disease, away from oil, gas and similar commodities, is a big advance. Somewhat crudely, Dutch Disease approaches may be called a Listian approach adapted to a world with variable exchange rates. The problem is the very same whether newly started oil production or soya mass production for export drive the exchange rate up.

Bresser-Pereira (2013) focuses on the exchange rate as the most important strategic price existing in market economies. In comparison "macroeconomic prices – the interest rate, the profit rate, the wage rate and inflation – are also important" (ibid., p.371) but none of these have such powerful effects on growth and stability of national economies as the exchange rate. The author rightly criticises the neglect

of exchange rates effects in traditional, orthodox trade theories. There are indeed only few papers dealing with exchange rates and their developmental importance (for one exception especially stressing the importance of exchange rates whose fluctuations may destroy orthodox trading models cf. Raffer 2015). Normally only shifts due to demand and supply are analysed. These fluctuations are seen as short term events, one has to put up with but otherwise irrelevant. Bresser stresses what he calls the value of the exchange rate – its value beyond short term fluctuations – in orthodox terms (which might not meet Bresser's approval) one may call it the long term equilibrium if the textbook market worked.

He sees Dutch Disease as a market failure, "a structural phenomenon that creates obstacles to industrialization or [...] provokes deindustrialization." (ibid., p.372). It is a market imperfection that hinders development or may even trigger the development of underdevelopment. He defines it as a "as country's chronic exchange rate overvaluation caused by the exploitation of abundant and cheap resources" (ibid.) Thus the exchange rate is appreciated beyond what it would be if internationally competitive tradeable sector enterprises determined the exchange rate.

An exchange rate driven up by exports of cheap and abundant resources destroys other otherwise competitive industries or does not allow them to develop further or at all. This sounds very much like List, even though List was not considering fluctuating exchange rates at all for obvious reasons. In his days this was not an issue. Although claiming List's problem to be also a Dutch Disease problem in nowadays' language, may rightly face objections, the common denominator of both concepts is price relations that impede development, may even deindustrialise a country or keep it from industrializing if the country is in that early stage of development. The difference is only that agriculture was already there when List analysed the necessity of diversification and the conditions for development. Primary commodity booms usually occur at a later stage, even though primary commodity deposits or production possibilities are there also from the start. Once oil wells are found the oil boom starts. But the basic problem is somehow the same.

In a way a country infected by Dutch Disease and a Listian country in need of infant industry protection face an absolutely identical problem. Cheap imports destroy the economy. Once prices for main exports fall drastically, they are affected in the same way. Their GDP falls, drastically on occasions, and this triggers serious economic problems. This can happen in a typically Dutch Disease country when (arguably rather than if) the price(s) for its main export good(s) fall(s) drastically. Such external shocks are typical for raw material exporters. This might be due to the business cycle, thus short term, or due to a long-term shift in demand. To give an example: plastic has largely substituted jute. Analysing raw material prices Prebisch (1949) and Singer (1950) correctly foresaw a problematic income elasticity, a decline in demand for raw materials as income in consumer (= Northern) states increases. This decline has become more relevant recently, as cutting down on resource use has become economic policy. Thus income elasticities for commodity export have deteriorated much beyond what Singer and Prebisch could have foreseen some seven decades ago. In this case a wrongly specialised country – due to Dutch Disease or because of not following List's, Graham's, Prebisch and Singer's advice – is in pre-

cisely the same dire straits. Their engine of growth and economic activity is gone – or at best mostly gone – and because there has never been a political will to build up other sectors of the economy, there is no other engine for the economy.

Not surprisingly, List did not take exchange rates into account. When he lived they were not of importance. For him cost and quality advantages of the already further developed industries were the important point. In modern economies and with floating exchange rates this is different, as Bresser-Pereira has frequently pointed out. Nevertheless, textbook theory has ignored the importance of exchange rates for their own economic models, and continues to do so. Orthodox economists are loath to discuss exchange rate changes and their effects on their textbook models based on real exchange, which does not occur. In a way understandably so, as their textbook models might crumble. Actually, bartering bottles of Port for English cloth is not the way foreign trade works, even though some very few individuals might actually do so. Specialisation fully in accordance with comparative costs is immediately made unprofitable if the exchange rate varies sufficiently (cf. Raffer 2015) be the reason capital mobility or large export surpluses. Thus, Germany has misguidedly established the euro in order to preclude exchange rate changes – devaluations by importers in particular – that would reduce its export drive. Quite asininely one forgot about logically accumulating Target 2 balances that simply mean that Germany is financing its own exports by automatically lending to importers. Like the emperor's new clothes this uncanny pretence can only be upheld until a child cries out (i.e., a country such as Italy leaves the euro and cannot pay).

Bresser-Pereira rightly emphasises the importance of the exchange rate, more precisely of the overvaluation of the national currency. Such changes may wipe out years of development efforts and destroy valuable resources.

Finally, it should be pointed out that abundant and cheap resources are very often products of extractive industries. Technically this means that depletion of assets is counted as income – just as if my withdrawing money from my bank account were booked as income. However, I am not a developing country. Therefore, this "intentional error" will not be made. Logically what happens in that case is an asset swap: assets in the ground changed to assets in the bank – or in my personal example assets in the bank to my personal pocket. Such swaps keep one's total economic position unchanged – until one spends the swapped amount and gets poorer. International GNP/GNI statistics deliberately do not take this into account. Northern states knowingly want wrong statistics. It would be easy to construct a measure of GNI taking these swaps into account (cf. Raffer 2007 that provides a crude but easy and quick way to correct this; for a fully elaborated and thus theoretically much better proposal cf. Stauffer and Lennon 1984). Taking some form of depletion factor into account is necessary if one calculates GNIs of countries heavily exporting extractive industry products. But as OECD countries do not have this problem – even in the case of the US, one of the biggest producers of extractive industry products, their share in total GNI is fairly low because other sectors dominate by far. In virtually all developing country exports this is not the case. Thus, the OECD just refuses to introduce correctly measuring Southern countries' economic product. Being powerful, they get away with it.

One thus has to point out that apart from crowding out promising industries, Dutch Disease also creates another danger. Once there are no more commodities one can extract from the soil, "income" from these exports also vanishes. Incorrect statistics crumble. Simultaneously, many other industries do no longer exist or are severely impaired because of the effects of once "successful" extractive exports, in other words because of squandering national assets.

Naturally, the picture is less gloomy in the case of renewable – usually agricultural – exports. One can plant and harvest every year – in some cases even more often than just once a year. Nevertheless, too intense use of the soil may (and often is) destroying the basis for future harvests. Also, cutting down tropical forests to use the newly gained soil intensively for export crops has already faced long term problems. Such soils were often quickly exhausted and can no longer be used commercially. In a way, though with clear differentiation, renewable, agricultural commodities and the extractive industries can face a very similar problem. Jungle soil cleared for agricultural production has often proved unfit for sustainable, profitable, and durable economic activity. Beyond destroying promising industries exchange overvaluation also destroys valuable assets because products are exported at a larger scale than indicated, and in the end at prices that are too low because of externalities. Assets such as productive soil or woods are destroyed without any compensation.

Of course, as is often pointed out, overvaluation also has short term advantages for some people. Imports and foreign travelling get cheap, increasing real wages of the employed and real income. Argentina in the era of the currency board with its 1:1 relation peso-dollar is just one prominent and sad example.

Logically, one faces the same problem, an impediment to the full development of other sectors and thus of the whole economy due to prices prohibiting or at least inhibiting development. In the worst case this effect is even favoured by externalities – or gratuitous consumption of national assets. Bresser-Pereira (2018, p.2) thus focuses on the exchange rate: "To these two assumptions – that economic development involves industrialization and the dependence on the exchange rate of the investment rate – I add a claim: that the investment rate depends on the exchange rate." Quite understandably so, as the exchange rate determines whether domestic manufacturing and exports are competitive internationally whatever real tarde theory might suggest. If they are not, rational people will not invest.

NECESSARY REMEDIES TO PROTECT DEVELOPMENT AND NATIONAL ECONOMIES

Sometimes, some form of protectionism, tariffs, or taxes on exports are needed to preserve a country's future economic health and economic prospects. As already mentioned above, this logical conclusion is anathema to orthodoxy and consequently exorcised from the religion of "proper" economics. Students are not bothered with such heresies. Even "industrialised" countries having applied and continuing to apply protectionism hypocritically speak out against protectionism. Textbooks do not even

mention such ideas. Looking at real trade policies one cannot help thinking of the regular brothel client speaking out against prostitution – most convincing indeed.

Both List and Bresser-Pereira (e.g., 2013 or 2018) therefore demand justified and necessary protectionism – one should rather speak of the correction of market failure or of negative external effects – in the form of tariffs or taxes. Other economists showing the malfunction of the really existing world "market" – as opposed to unrealistic theoretical models that simply omit real problems for the sake of alleged mathematic elegance, or flat-earthism – also come invariably to the conclusion that government intervention is necessary to protect the future prospects of some economies. After showing that the country specialising "wrongly" on the product with decreasing returns to scale will break down economically because of specializing according to comparative costs and if just the one as decisive as totally unrealistic assumption of constant returns is dropped, Graham (1923) demands the adoption of protectionist intervention as a rational and necessary policy, literally to save the country. In a way this a policy against Dutch Disease in a broader sense. Seeing that the market is biased against primary commodities and proving that the textbook market mechanism does not function, Prebisch (1949) and Singer (1950) demanded protecting the comparatively younger manufacturing industries of then traditional raw material exporters against advanced and overwhelming producers from the North in order to be able to diversify.

Reading their publications, though, one can also see that they warned against Dutch Disease: specializing on commodities hinders development. Even though the Prebisch-Singer Thesis does not argue via exchange rates – strictly speaking one may therefore say it is no Dutch Disease argument – it may be interpreted as well as a Listian as a Dutch Disease approach. Primary commodities enjoy advantages due to market imperfections, it is difficult to say whether it is more List than the latter.

Prebisch (1959) thought that selective protectionist barriers should equalise the disadvantages of infant industries in promising branches, allowing them to compete with established Northern producers. He (ibid., p.259) warned that "protection itself does not increase productivity. On the contrary, if excessive, it tends to weaken the incentive to produce." He noted that in "some cases indiscriminate protection" had "gone far beyond the optimum point, to the serious detriment of exports and world trade" (ibid., p.265). This has happened in quite a few Latin American countries. Prebisch advocated a "cautious and selective policy of protection" not conflicting with "the advisability of reducing and eventually eliminating protection" (ibid., p.260). Expressed by a catch-phrase one could call Prebisch's detailed advice as the golf model of development. As the handicap with golfing, protective barriers should equalise the chances of competitors to win. As players get better their handicap diminishes. Of course, orthodox textbooks do not even mention such arguments, important as they are in real life. Also, in contradiction to what they really advised (cf., e.g., Raffer & Singer 2001, especially pp.16ff). Against published proofs, Prebisch and Singer are presented as advocates of virtually indiscriminate protectionism.

Like List, Prebisch and Singer saw protection and import substituting industrialisation as temporary phases. Protection against Dutch Disease is also temporary

– even though these resources may last for quite a long time and the disease may thus persist for quite some time. Once an economy has developed to a stage, where it is fairly balanced, its undue dependence on the export of one commodity (or some very few commodities) has been overcome. Then one can reconsider the need for "a variable tax on the export of commodities, or, as second best (because it neutralises the Dutch Disease only in relation to the domestic market), an import tariff on manufactured goods at levels sufficient to compensate the disadvantage represented by the appreciated exchange rate" (Bresser-Pereira 2019, p.3). If the country develops, this is also a transitional period, a temporary necessity. In this respect Bresser-Pereia, Prebisch, Singer and dependencia converge – a convergence Heckscher and Ohlin would no doubt have approved.

Of course, the exchange rate continues to be a problem. Oil exporters in particular have meanwhile found a solution, national funds, as already mentioned above. As these funds usually invest in foreign currency assets, the problem of exchange rates driven up by money flooding into the country because of Dutch Disease exports is abolished or at least very strongly mitigated. Such funds investing surplus foreign exchange in foreign assets literally exchange assets in the ground for financial assets in other countries. This is simply an asset swap, whether good or bad for the country concerned is up to judgement.

Naturally, oil exporters differ from other primary commodities exporters. It is easier for them to sterilise funds that way, thus also implementing a stabilizing mechanism. If oil prices fall, one can draw on the fund. In their case, however, the export commodity is largely state owned or the income comes from taxing oil production. In the case of export goods such as soya there exists a large number of exporters, and it would be difficult – quite likely even destabilizing – to refuse to change their receipts into domestic currency. Also, too heavy taxation may downsize or even destroy the affected export industries. While this would reduce or abolish any Dutch Disease effect, it may also have negative impacts on the economy. Another approach is thus called for if one wishes to continue exporting, which might be important, especially but not only for heavily indebted countries.

HOW TO FIGHT DUTCH DISEASE?

Bresser-Pereira (2018) proposes a variable tax on commodity exports or, as second best (because it neutralises Dutch Disease only in relation to the domestic market), an import tariff on manufactured goods at levels sufficient to compensate the disadvantage represented by the appreciated exchange rate.

He argues (ibid., p.1) that "many countries that industrialized successfully" had "used high import tariffs, not to protect the manufacturing industry, but to neutralise the Dutch Disease on the domestic market side", levelling "the playing field between the developing country and the already industrialized country". Here, Bresser argues a bit Listian – which shows the affinity of List and his Dutch Disease theory.

There exists a problem in verifying this conclusion. It seems difficult to disentangle the Listian and the Bresserian effects. Late industrialisers are quite likely to

face both effects, having one or more infant industries and facing an unfavourable exchange rate in an age of flexible exchange rates. When the author mentions import substitution strategies (ibid., p.1) this becomes very clear. Yes, the high import tariffs charged were a method to neutralise disadvantages – one may discuss whether this is protectionist, just necessary or not – but it seems impossible to distinguish clearly between infant industry and Dutch Disease protection if one stuck to the letter. As the author is Brazilian one can understand why the second aspect is stressed so strongly. Brazil was one of the early industrialisers among developing countries, already having a noteworthy secondary sector before 1945, but still remaining strongly dependent on agricultural exports.

Obviously, the question which effect was really more important (or even only important) is not of much consequence for economic policy. Be it a Listian or a Bresserian case, the same defence is called for. Important as analysis may be theoretically, in real life avoiding negative effects is paramount. The reasons for such effects are secondary if one accomplishes neutralizing them.

One should also note that a fixed exchange rate system – Bretton Woods – does not necessarily avoid Bresserian overvaluation. If more or less fixed exchange rates were set too high for some countries, the problem would just have been petrified.

As regards import tariffs, Bresser-Pereira (2018) puts his finger on the difficulties these would face: rent seekers, politicians all too happy about an overvalued currency that allows cheap imports thus increasing real income and virtually or at least very often ensuring the re-election of these politicians in the short run. There are powerful vested interests against import tariffs, which make Bresser-Pereira opt for export tariffs as the better alternative.

It seems interesting to compare Bresser-Pereira's argument with Prebisch's best option. Raúl Prebisch (e.g., 1959, 1984) strongly recommended export subsidies, such as those given to Korean firms, as the best measure to overcome disadvantages faced by Southern exporters. Rightly thinking, however, that these subsidies might meet stronger opposition from the North – even though Northern countries themselves subsidise exports on a large scale – than infant industry protection, import substitution (i.e., import taxes) would thus be a second best but workable solution. Naturally, South Korea and Taiwan enjoyed non-economic, Cold-War dictated liberties other countries were not allowed to enjoy. Prebisch's and Singer's emphasis was always on industrialisation. Protection should make up for cost disadvantages, to be eventually phased out in line with productivity improvements of domestic Southern industries. These economies should then turn to export led growth. H.W. Singer (1986, p.6) emphasises the strong influence of Prebisch's ideas in Korea, pointing out that many Korean economomists are very conscious of that heritage. Due to political circumstances, South Korea was allowed to follow Prebisch's first best advice that closely. In addition, South Korea established a very strong development state that determined the rules for Korean firms in detail (Rhee et al. 1984), including economic planning.

The resistance noted by Bresser-Pereira was indeed the reason why Latin American countries did not follow Prebisch and Singer as successfully as Asian Dragons. In the end they opted for import tariffs as the workable solution, even though

vested interests did not allow this to work as advised by Prebisch and Singer. Nothing even remotely comparable to South Korean government intervention has ever been seen in Latin America.

One further option to neutralise Dutch Disease is allowing – even encouraging – exporters to hold bank accounts at domestic banks or the national bank in foreign currency. While oil or gas (as well as some minerals) render earnings to the government, Bresserian Dutch Disease mainly describes a situation where there are many exporters of primary products. Therefore, another way of keeping foreign exchange earned by exports out of the exporting country has to be found.

In many countries such foreign currency accounts would doubtlessly be acclaimed by exporters. This way, foreign exchange earnings would not be changed into national money. Thus, both inflation and exchange rate changes could be controlled in a better way. Technically it resembles oil funds.

Theoretically, this arrangement could also reduce or even abolish capital flight. In practice, though, capital flight depends on more than one parameter. Trust in the government that it would not expropriate those funds if kept at domestic banks, or that it at least would not take measures to reduce the value of such accounts is another most important factor. Because of such fears, Switzerland, e.g., could even occasionally charge negative interest rates – people have been prepared to pay for security, de facto some kind of insurance fee. Such accounts are therefore unlikely to be used by all people earning foreign exchange. Trust would have to be earned, and this cannot be done in the short term. Building trust might be quite difficult in some countries.

Naturally, these accounts and any income generated by them would have to be taxed and treated in precisely the same as assets (if there is a tax on them) or income are taxed domestically. Non-discrimination is one important and necessary condition. This in turn may also be an incentive for exporters not to hold accounts in their own country. The Cayman Islands with an income tax of zero percent or other tax havens would no doubt be seen as an alternative. But tax laws can introduce disincentives to such behaviour, and they should so.

If successful, this scheme of foreign exchange accounts held within the country would be equivalent to oil-funds. Devices earned would not circulate domestically, thus not contributing to inflation. They would not be exchanged into domestic currency – a fact that the owners of such accounts might cherish – thus not affecting the exchange rate. If totally successful, Dutch Disease would be stamped out.

This proposal is, of course, not exclusive. It can well be combined with other measures. Thus, it can be combined with an import tax, an export tax et cetera, depending on the concrete situation of a country. The successful mix for any given country might well be different from other countries, depending on the country's specific conditions.

CONCLUSION

Analysing the relation between List's problem of the blockage of other, more modern sectors in need to develop and the Dutch Disease problem that also puts

all other sectors at a disadvantage one can show that the two phenomena show quite a few similarities. Two sides of the same coin, really. The main difference is that the exchange rate was not considered by List for understandable reasons. It is now of paramount importance.

In both cases "normal" development is blocked from without. Thus, in both cases remedies against this external intervention are necessary. Comparing distinguished sources, such as List, or Prebisch-Singer, as well as officially "forgotten" contributions – Graham, guilty of committing crime-think according to orthodoxy by proving that comparative advantages may well not work to anyone's advantage – or dependencia this paper shows how List's concern and Bresser-Pereira's are very similar, possibly not identical due to the importance of exchange rates that was once absent. It analyses options how to counter Dutch Disease deformations of economies.

Discussing Bresser-Pereira, who broadened the concept and understanding of Dutch Disease – a broadening that was absolutely necessary – this paper shows that generalizing the concept of Dutch Disease makes it even more resembling List's argument. Using a catchword, one may call Bresser's approach as List for economies facing exchange rate changes. This paper adds another option to his advice, foreign exchange accounts within the exporting countries over which owners can freely dispose. This option can be implemented alone or it can be easily combined with other measures.

Bresser-Pereira's generalised Dutch Disease concept is a valuable contribution to the debate on appropriate economic policies in Southern countries. It shows a way to counter such mal-developments, and it certainly deserves further discussion because quite a few countries suffer from the malfunctioning described by Bresser. His arguments fit very well into other unorthodox approaches that also tried to counter the inefficiency of really existing markets.

REFERENCES

Bresser-Pereira, Luiz Carlos (2008) "Dutrch Disease and its Neutralization: A Ricardian Approach", *Brazilian Journal of Political Economy* **28**(1):47-71

Bresser-Pereira, Luiz Carlos (2013) "The *value* of the exchange rate and the Dutch Disease", *Brazilian Journal of Political Economy* **33**(3), pp.371-387

Bresser-Pereira, Luiz Carlos (2017) "How to neutralize the Dutch Disease notwithstanding the natural resources curse", Working Paper 452, FGV- Sao Paulo School of Economics

Bresser-Pereira, Luiz Carlos (2018) "Neutralizing the Dutch Disease", mimeo, August 2018

Bresser-Pereira, Luiz Carlos (2019) "Principles of New Developmentalism", mimeo received in 2019, but undated

Cone, Steve (2008) *Powerlines: Words That Sell Brands, Grip Fans, and Sometimes Change History*, Bloomberg Press, New York

Corden, W. Max (1984) "Booming Sector and Dutch Disease Economies: Survey and Consolidation", *Oxford Economic Papers* 36(3), pp.359-380

Corden, W. Max and J. Peter Neary (1982) "Booming Sector and De-industrialization in a Small Open Economy", *Economic Journal* 92 (368): 825-848, https://doi.org/10.2307/2232670

Frank, André Gunder (1966) *The Development of Underdevelopment*, Boston: New England Free Press

Graham, Frank D. (1923) “Some Aspects of Protection Further Considered”, *Quarterly Journal of Economics*, vol.37, pp.193ff

Heckscher, Eli (1950) “The Effect of Foreign Trade on the Distribution of Income”, in: H. Ellis & L. Metzler (eds): *Readings in the Theory of International Trade*, Allen & Unwin, London, (Orig. in: *Ekonomisk Tidskrift*, vol.XXI, 1919)

Kay, Cristobál (1989) *Latin American theories of development and underdevelopment*. London & New York: Routledge

Keynes, John M (1965) *A Treatise on Money*, vol. II. London, Macmillan

List, Friedrich (1920) *Das nationale System der politischen Ökonomie*, 3rd ed. G. Fischer, Jena (orig. publ. in 1841; Engl.tr. published 1904 by Longman, London)

Ohlin, Bertil (1967) *Interregional and International Trade*, Cambridge (Mass), Harvard UP

Palma, J.G. (1989) “Dependency”, in: John Eatwell. Murray Milgate & Peter Newman (eds) *Economic Development – The New Palgrave*, Macmillan:, London & Basingstoke, pp.91-95

Prebisch, Raúl (1949) “El desarrollo económico de la América latina y algunos de sus principales problemas”, *El Trimestre Económ*ico, vol. XVI, no.3 (Julio-Sept.), pp.447ff. (Engl. version published by UN-ECLA in 1950)

Prebisch, Raúl (1959) Commercial Policies in the Underdeveloped Countries” *American Economic Review*, *P&P*, (May) vol.49, pp.251ff.

Prebisch, Raúl (1984) “Five Stages in My Thinking on Development”, in: G.M. Meier & D. Seers (eds) *Pioneers in Development*, Oxford University Press, Oxford etc., pp.175ff

Raffer, Kunibert (1987) “Tendencies Towards a ‘Neo Listian’ World Economy”, *Journal für Entwicklungspolitik* 3(3), pp.45ff.

Raffer, Kunibert (1994) “Disadvantaging Comparative Advantages: The Problem of Decreasing Returns”, in: Renée Prendergast and Frances Stewart (eds) *Market Forces and World Development*, Macmillan, London & Basingstoke, pp. 75-90

Kunibert Raffer (2000) “New Forms of Dependence in the World System”, in: Andreas Müller, Arno Tausch & Paul M. Zulehner (eds) *Global Capitalism, Liberation Theology and the Social Sciences*, Nova Science Publications, Huntington, NY, pp.169-184

Raffer, Kunibert (2007) “Macro-Economic Evolutions of Arab Economies: A Foundation for Structural Reforms“, *OPEC Fund Pamphlet Series* No 36

Raffer, Kunibert (2015) “Neoliberalism and Global Capital Mobility: A Necessary Reconsideration of Textbook Trade Theory”, *Brazilian Journal of Political Economy* **35**(2), pp. 267-284

Raffer, Kunibert (2019) “Developing Economies and Newly Globalized Trade: New Rules to Fleece the South”, in: Nezameddin Faghih (ed) *Globalization and Development – Economic and Socio-Cultural Perspectives from Emerging Markets,* Springer, pp. 75-92.

Raffer, Kunibert & HW Singer (2001) *The Economic North-South Divide: Six Decades of Unequal Development*, Edward Elgar, Cheltenham (UK)/Northampton (US); Paperpack: 2002; 2004; also available at Elgaronline.com/view/1840641525.xml

Rhee, Y.W., B. Ross-Larson and G. Pursell (1984) *Korea’s Competitive Edge – Managing the Entry into World Markets* (A World Bank Research Publication), Johns Hopkins UP, Baltimore

Rodrik, Dani (1996) “Understanding Policy Reform’, *Journal of Economic Literature* XXXIV (1), pp.9ff

Singer, H.W. (1950) “The Distribution of Gains between Investing and Borrowing Countries”, *American Economic Review, P&P*, vol. XL, pp.478ff.

Singer, H.W. (1986) “Raúl Prebisch and His Advocacy of Import Substitution’, *Development & South-South Cooperation*, vol.II, n.3 (Special Issue: ‘Hommage to Raúl Prebisch’), pp.1ff

Stauffer, Thomas R. and F.H. Lennon (1984) *Accounting for “Wasting Assets”: Income Measurement for Oil and Mineral Exporting Rentier States*, OPEC Fund Pamphlet Series No 25