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Abstract

This paper describes the socio-economic adjustment effects exerted by globalization

(taking as starting points competitive pressure, sectoral shifts, and financial market

contagion) and discusses their relevance for domestic policy-making. I argue that these

economic pressures and changes constrain government's policy choice set to an extent that

actual government policies are quite freed from any political ideological context. Important

government tasks in a globalized economy include remedying information asymmetries

and regulating markets as well as provision of essential goods.

Key words: globalization, trade, domestic policy, deregulation, competition, financial

markets

JEL codes: H41, F15

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1. Introduction¹

A new phenomenon is increasingly getting into the focus of socio-economic research: globalization and how it impacts people's socio-economic lives. As such, international trade is not new to mankind - as its history, spanning from the Roman Empire, the middleaged Hansa trade organization, to the trans-Alpine and the Sino-European silk trade routes, suggests. However, prior to the 19th century, cross-national and cross-regional exchange had its physical limits and was often restricted to highly profitable luxury goods: For example, trade of firm shares through financial markets was limited to the firms in the region close-by, with the financial market's reach determined by the horse speed of messengers traveling on streets that turned into mud in autumn. Also, most goods traded were profitable luxury goods consumed by the richer middle and upper classes, e.g. gold, wine, silk, salt, spices (one may recall the wine-cloth example in the Ricardo model, where British cloth at that time was of the highest quality). However, this picture of rather marginal economic international connectedness changed with the dawn of industrialization, as technologies for cheap mass production and new transport technologies became available, but also through its improvements in contract enforceability and abolishment of bridge tolls, import and export taxes.

With the dawn of industrialization rather small-scale international trade 'turned' into what we may call nowadays 'globalization', or the 'globalized economy'. The new quality of this phenomenon is that it affects now not only an aristocratic or wealthy elite but the common man, in various dimensions: first, goods traded include now mostly normal goods (and its components) that are consumed on a daily basis, ranging from toilet paper to yoghurt, aiming at meeting a common man's demand; second, capital flows now freely across countries, seeking the most attractive investment opportunities, open to be taken up

by the common man (and their portfolio managers). Globalization also affects the common man not only in his/her role as consumer and investor, but also as worker, as the opening-up of the domestic market to foreign imports pressures his/her employer to stay competitive — and this not only in a specific, small export sector, but in all economic sectors that are directly or indirectly exposed to foreign supply and demand. Finally, the common man in his/her role as laborer may decide herself to go migrate to the best-paid job, transgressing borders between states. Economic globalization as such is a dynamic process that transforms the structure of the domestic economy, and once it has gained a certain momentum, it continuously accelerates and becomes unstoppable. In such globalized economy, development prospects of the domestic economy increasingly depend on international trade and capital markets, and, thus, at a large scale, so does the well-being of the common man.

This paper asks the question whether the turning of the national economy into a globalized economy has an effect on governments' choice set of feasible policies. The underlying idea is that as a country globalizes, its economic development becomes more and more determined by exterior economic drivers, and lesser and lesser by internal processes; globalization forces the domestic economy to stay competitive, to deregulate markets, to lower government spending and tax levels, triggering brutal and unavoidable structural changes, causing much collateral economic 'damage' such as sectoral unemployment and increasing income inequality. In addition, stronger financial linkages across countries make the single country more vulnerable to developments in their trading partners' economies. In consequence, governments loose their discretionary decision-making power and influence over the domestic economy. This paper draws this conclusion by presenting classical and modern models of trade and providing illustrative examples of sectoral structural changes; the innovative contribution lies in discussing these otherwise quite

known predictions and developments from a new angle - that is from the viewpoint of domestic governments' policy choices. It concludes with a discussion of which tasks remain to national governments in a globalized economy: combating welfare-lowering (side) effects of globalization, e.g. through smoothing transformation processes, remedying information asymmetries (in the financial sector), imposing externality-correcting instruments on imported goods produced under violation of workers' or human rights, and public provision of, or control over, essential goods such as water, electricity, infrastructure, and food.

2. The impact of globalization on the domestic economy

Economic globalization, as described in the introduction, is the increasing integration of a country into the world markets for goods, capital and labor. Domestically, such increasing exposure to international markets manifests in rising volumes of exported and imported goods and services, as well as increasing outflows of domestic savings into foreign investment projects, and increasing inflows of foreign capital into domestic companies. With today's modern means of transportation and English as established 'lingua franca', economic globalization is also reflected in an increasing mobility of labor across countries, skilled and unskilled likewise. Economic globalization also manifests in foreign direct investment (FDI) (such as in the re-location of entire production facilities into foreign countries), in joint ventures between domestic and foreign companies (inducing knowledge transfer across countries), and in services provided from 'abroad' for domestic companies and vice versa. Overall, economic globalization is a multidimensional dynamic process of integrating one country into the world economy that, once it has gained a certain momentum, continuously accelerates and becomes unstoppable (see, e.g., Proudman and

Redding, 2000, for a dynamic model). The following sections discuss the socio-economic effects of globalization with a special focus on competitive pressure, on sectoral-structural changes, on financial international interdependencies, and how these processes generate strictly binding constraints for domestic policy choices.

2.1. Globalization pressures domestic economy to be efficient

The process of globalization forces the domestic economy to stay competitive; this has, from government's point of view, the disadvantage of restraining her policy choice set and, thus, limiting her discretionary power over the country. For example, integration of the domestic economy into world goods and capital markets forces local producers to increase their efficiency in production and to produce at competitive costs, in order to remain attractive for (foreign) investors and (foreign) consumers (similarly, Garett 1995); consequently, as economic globalization increases, domestic firms may lobby for a deregulation of national labor markets. Domestic firms under pressure may also demand lower taxes and social security contributions, which both make the production factor labor more costly, thus lowering their international competitiveness (see similarly, Blank and Freeman, 1994). Indeed, the model by Cai and Treisman, (2005) predicts that, under capital mobility, countries with an initially rich endowment in one production factor will have, in equilibrium, generated an attractive business environment with low tax levels and less government spending. In turn, a shrinking tax base, however, exerts pressure on governments to reduce their absolute and relative spending levels (Garett and Mitchell, 2001; Hines and Summers, 2009). This welfare spending restraining effect is often referred to as the 'disciplining effect' of economic globalization (e.g. Garett, 1995). On the empirical side, Garett and Mitchell (2001) report a restraining impact of trade openness on government spending, while Plümper et al. (2005) show analogous effects exerted by the amount of low-wage imports (for budget compositional effects, see, e.g., Garrett, 1995).³ In support of the labor-market related predictions, the accounts in Lindert and Williamson (2001) suggest that increasing trade openness is often accompanied by domestic market liberalization and a decreasing generosity of the welfare state. Similarly, Fischer and Somogyi (2011) and Dreher and Gaston (2007) have shown that over the last 20 years in OECD countries economic globalization has lead to a decrease in worker's employment protection and union density.⁴ Taken altogether, in order to stay competitive in a globalized world, governments are under pressure to deregulate labor markets, to liberalize capital markets and, ultimately, to lower taxes and government spending. Most importantly for my argumentation, such economic pressures persist irrespective of the political ideology of the national party that is currently in power (e.g. Baldwin and Krugman, 2004; Oian and Roland, 1998).

2.2. Globalization induces structural changes across economic sectors

Another example for how the domestic politics looses discretionary power over the domestic economy are the unavoidable long-run effects of economic globalization on the relative size of the sectors in an economy, the employment prospects of low-skilled and high-skilled workers, and the consequences for income distribution. According to the standard model of trade (e.g. Krugman and Obstfeld, 2011), integration into the world economy causes a country to specialize in the economic sector the country has a comparative advantage relative to the world market (e.g. through a relative or absolute abundance of a certain production factor). In OECD countries, such specialization will be rather in the industrial than in the agricultural sector, rather in high-skilled than in low-skilled labor production, and rather in capital-intensive than in labor-intensive industries. Classical trade models which assume full employment predict then overall income

inequality to increase as the immobile, sector-specific factor in the exporting sector gains from trade, while its sector-specific counterpart in the other sector loses (Ricardo-Viner model); applied to OECD countries, high-skilled labor would experience wage increases, while wage of the low-skilled would fall. This development is acerbated by productivity growth through learning-by-doing effects in the exporting sector (Proudman and Redding, 2000).⁵ In consequence, at the sectoral level, forces of globalization will attract production factors into those sectors and industries the domestic economy specializes in, while, on the other hand, setting free production factors in the economic sectors that are then destined to contract. This structural change is aggravated through international capital flows and FDI, transferring more efficient technologies from abroad into exporting local firms (Bernstein, 2000; Coe and Helpman, 1995; Mohnen, 2001; van Pottelsberghe and Lichtenberg, 2001), forcing inefficient competitors out of the domestic market (Haddad and Harrison, 1993). Also the classical Rybczynski-theorem predicts capital inflows to acerbate this development: under fixed goods prices a rise in factor endowment should increase the output overproportionally of that economic sector that uses this factor intensively – leading to (further) (relative) specialization in that sector and shrinkage of the other. Thus, for OECD countries one may expect an inflow of capital that increases the production of capital-intensive goods, ultimately contributing to further contraction of the labor-intensive production.

With labor market rigidities, dislocations caused by such structural changes may include increased job turnover and short-run structural or frictional unemployment (for a model, see, e.g., Bernard et al., 2007). Assuming a two-factor two-good Heckscher-Ohlin model with capital and labor but allowing for unemployment, Davidson et al. (1999) predict unemployment to rise in the sector that uses labor intensively but does not export – caused by the endogenous sector-specifity of labor resulting from matching and searching costs.

Supporting empirical evidence for the unemployment-increasing effect of trade liberalization can be found in, e.g., Trefler (2004) for the case of the NAFTA.⁶ In developed countries, specialization in the high-technology industry with high-skilled labor may then lead to mass dismissals of unskilled workers in the low-technology industry, exerting pressure on their wages. Krugman (1995) has shown that in the US with flexible labor markets wages for low-skilled workers (possibly employed in the contracting economic sector) have declined, while in Europe instead, with more rigid labor markets, unemployment of low-skilled workers has risen.

That globalization increases income disparities between workers and capital owners is concluded by, e.g., ten Raa and Mohnen (2008) who suggest that international competition in goods markets drives down rents on labor, while (positive) rent levels on capital persist for future R&D investments. Already the classical Rybczynski-theorem predicts that in developed countries international trade leads to higher rents for capital and high-skilled labor than for other production factors.7 Applying tax competition models to an international context, Baldwin and Krugman (2004) conclude that under strong economic globalization, in developed countries with their larger capital endowments tax levels are lowered, implying less means for redistribution and a more skewed income distribution, when compared to developing countries that are abundant in labor. In general, economists hypothesize that globalization most possibly forces governments to tax bases that are least responsive to the forces of worldwide competition – implying that those production factors are taxed higher that are relatively less mobile than the other ones, such as immobile labor in classical trade models (Garett, 1995; see Bretschger and Hettich, 2002, for empirical evidence). Indeed, taxation of labor (wages) is rather observed in populous countries, while in small countries with higher international labor mobility rather goods, services, and imports are taxed (Hines and Summers, 2009) - reducing overall fiscal progressivity. Many

other modern trade theories equally predict a more skewed income distribution, e.g., Egger and Kreickmeier (2009), Feenstra and Hanson (1997), and Gaston and Nelson (2002). That economic globalization causes particularly wage disparities in OECD countries to grow has been empirically shown by Wood (1994), Burtless (1995), Dollar (2002), Dreher and Gaston (2008), while the confirmatory study by Smeeding (2002) uses a micro-level approach.⁸

Empirical evidence on sector shifts

While there is ample empirical research on the linkages between international trade and income inequality and unemployment (see above), the evidence on the impact of globalization on sector shifts in the economy merits a separate in-depth investigation. That the forces of economic globalization cause structural changes in the involved economies can be concluded from country-sector-specific developments of (relative) export shares and employment patterns.⁹ Proudman and Redding (2000) show such industrial development patterns for the G-5 economies between 1970 and 1993: For example, export shares indicate a shrinkage and, thus, loss in comparative advantage in the motor vehicle industry in France and the USA, the computer sector in Germany, the metal production in Great Britain, and the textile industry in Japan. In contrast, specialization occurred in the communication industry in the U.K., in the paper and printing industry in the U.S., in the aerospace industry in France, and in the motor vehicle industry in Japan. In general, since the 50ies Middle and Southern Europe experienced the closing down of footwear and cloth manufactures. Since the nineties the same occurred in post-communist Eastern Europe (see ILO, 1996); for example, in Latvia between 1990 and 2008 the shoe pair production shrank from some 20 million pairs (1996: 2,2 millions) to some mere 156'000 pairs. ¹⁰ In the same geographic region, this development was paralleled by the shrinking of the agricultural sector (as % of GDP), resulting in a growing dependence on agricultural imports from mainly developing countries.¹¹ In consequence, unemployment in these shrinking sectors increased. For example, between 1980 and 1993 employment in the textile, clothing, and footwear industries declined by 40% in Germany, by 35% in Spain, by 51% in Poland, and by 30% in the USA (see ILO, 1996).¹² Prominent present-time examples of sectoral changes include the phasing out of subsidizing the coal and mining sectors as well as parts of the automotive sector, where the pressure to do so increased substantially through the fall of the iron curtain and the emergence of the automobile sector in the South-East Asian countries. From 1985 to 2007, employment in British mines fell from 220'000 workers to 7'000 workers (Germany: 607'000 workers in 1957, then 166'000 in 1985, and 35'000 in 2007); main coal producer is now China.¹³ In the automobile sector, between 1997 and 2005 the contribution of the automotive industry to GDP has substantially fallen in France, Great Britain, Italy, and Spain (with the exception of Germany which specialized in highend products), while at the same time the car production has tripled in India and quadrupled in China (see Holweg et al., 2009).

Since the driving factors of these sectoral shifts are structural ones, namely the loss in comparative advantage in specific industries, subsidizing the production in such 'endangered' industries may reduce the speed of this adjustment process and appease the workers in the shrinking sectors. In the long-run, however, as globalization increases, subsidies will cause greater economic inefficiencies and welfare losses, ultimately becoming so large that budgetary and efficiency concerns will force governments to put this policy to an end. Notably, in Germany the decision in 2007 to cease subsidizing the coal mining sector was made by a left-right pro-worker coalition government – being an illustrative example that globalization leads to economic necessities that supersede political ideology.¹⁴

Taken altogether, globalization exerts pressures on economic sectors with a comparative disadvantage, making them contract and letting entire industries disappear; the resulting sectoral unemployment and increase in overall income inequality will occur despite national government's efforts to gain control and possibly counteract this process, and irrespective of the couleur of the political parties in power.

2.3. Globalization leads to dependence on international financial markets

Finally, economic globalization also manifests in the increasing linkages between foreign and domestic financial markets (through economic interdependencies, but also through herding contagion via the behavior of internationally acting investors, see Calvo und Reinhart, 1996; Dornbusch et al., 2000; Khan and Park, 2009). Thus, globalization is predicted to aggravate the impact of a recession or a financial market crash abroad on the domestic economy. The higher the degree of a country's economic integration is, the larger the effect of the world economy on the local economy may be; the strongerly interlinked national economies all over the world are, the more likely economic 'domino effects' are to occur (similarly, Hertz 1999). Due to the speed of the cross-national transactions in milliseconds and the information transparency in financial and capital markets, as compared to goods markets, cross-country domino effects are more likely to be transmitted first through the financial channels before they start, with some time lag, working through the traditional international trade-in-goods-relations (Hernández and Valdés, 2001; Van Rijckeghem and Weder, 2001; Forbes, 2004). In the international trade-in-goods-relations (Hernández and Valdés, 2001; Van Rijckeghem and Weder, 2001; Forbes, 2004).

Illustrative examples for domino effects are various past- and present-time financial market crises, among others, the US stock market crash of October 1987 crisis, the Mexican crisis of 1994, the Asian crash of 1997, US-driven crisis of 2008-09, the new economy bubble-

burst of 1999/2000, and the Eurozone crisis of 2011 (e.g. Kleimeier et al., 2008; Khan and Park, 2009; Markwat et al., 2009):¹⁷ the 1997 Asian crisis, for instance, started first with a currency crisis in Thailand, then spilled over to financial markets in Asian countries of the same region – one argues through herding contagion of Western investors, others argue with inefficient financial intermediation of moral-hazard-infected 'finance companies' and market prices of capital and land -; finally, the Thailand crisis spilled-over also to developed countries such as the U.S.A and Western Europe (Ito, 2007; Krugman, 1998; Radelet and Sachs, 1998). In 2008/09, it was the break-down of the US American market for houses, followed by that for mortgages loans, then that for mortgage-backed securities, which then triggered first a local US-wide, and then finally a world-wide financial market crisis: the sudden collapse in mutual trust between then undercapitalized private and public financial intermediaries led to a liquidity crisis worldwide (on the role of trust, see also Guiso, 2010). 18 In the case of the 2010-11 crisis, the over-accumulation of debts of the Greek government of up to 150% of GDP first affected the market for government bonds in Greece only, where interest rates started to skyrocket, ¹⁹ leading to a loss in sovereignty over their national budget to the IMF and the EU (Alessi, 2011). Then, via the EUROcurrency-link and 'wake-up-effects' (Forbes, 2004)²⁰, the entire Euro-currency area got into the focus of international investors' critical assessments, and interest rates for national treasure bonds, particularly strong for the PIGS-countries, increased.²¹ With the remaining Euro countries partly and temporarily bailing out Greece, Portugal, and Ireland²², the debt crisis of Greece became a collective one: first, with shrinking credibility and creditworthiness of the Greek government spilling over to other PIGS countries ('sovereign debt contagion'), and, then, to the initially unaffected non-PIGS-countries, whose growing rescue efforts let their own debt-to-GDP ratios substantially increase (see Alessi, 2011, for an analysis of the Eurozone crisis).²³

There is empirical evidence that financial linkages via international capital markets spill over into the real economy. In particular, the financial market crises described above are shown to also impact the real economy of countries all around the world - through triggering lower growth, causing considerable inflation, in addition to higher unemployment and larger government debt (Ito, 2007; Mishkin, 1992).²⁴ For example, "the October 1987 crash [...] reduced stock prices by over 20% in most developed markets" (Markwat, 2009, p.1996), leading to bankruptcies of banks and firms (Krugman, 1998). In 2008/2009, as a result of the US housing market crisis Irish banks collapsed, which lead to a shrinkage of GDP by 10%, and an increase in unemployment by 9 percentage points (e.g. Alessi, 2011). Similarly, the Eurozone crisis caused (exogenously imposed) budget cuts by the Greek government, letting Greek unemployment rates skyrocket from about 12% to 18% (September 2011), compared to one year ago, and the youth unemployment rate reach 46% (September 2011).²⁵ Similarly for the other PIGS-countries, youth unemployment in Spain rose from 42.8% to 49.3% (from 10/2010 to 10/2011), and in Portugal from 27% to 31%, but stayed at 30% in Italy. In other EU countries during the same period, youth unemployment was falling, such as in Slovenia and Finland (18% to 12%, and 19% to 16%, respectively).²⁶ Taken altogether, the argument in these examples is not that in PIGScountries globalization forces domestic governments to cut debts against their will (which would have become economically necessary anyhow); rather, my argument is that globalization exogenously imposes a specific timeline on domestic policy-making, in particular a certain speed and roughness in making reforms that might not be in congruence with local political preferences. Overall, growing global linkages through financial markets let foreign economies and investors gain more and more impact on the local economy, taking the country out of the control of local policy-making.

3. Globalization restrains policy choices of domestic governments

The discussion so far has revealed that globalization exerts strong pressures on the domestic economy to stay competitive and to reduce government spending, that it triggers fast and rough sectoral shifts, and that it creates strong international financial dependencies. As an inevitable result, these pressures of globalization restrain governments' choice set w.r.t. economic policy-making: Globalization induces structural changes that are, in the long-run, unavoidable, possibly creating mass unemployment in one economic sector, while leading to economic growth and worker shortage in another sector, increasing income inequality within the group of workers, and between workers and capital-owners. In addition, in order to stay competitive, globalization also exerts pressure to pursue policies of labor market deregulation, to shift the tax burden from capital onto less mobile labor and consumption, and to cut government and welfare spending. Finally, globalization creates vibrant trade and capital linkages across countries leading to strong cross-national economic dependencies and domino effects, with the potential to aggravate or even to cause national economic crises. Obviously, globalization makes the local economy re-structure - which may be to the benefit of some societal groups (production factors), but equally to the disadvantage of others.²⁷

The argument here is not about assessing whether these economic adjustment processes are overally 'good' or 'bad'; the argument I develop here is about that these changes and most of their socio-economic consequences are not under the control of domestic politics. The idea here is that governments may be compelled to carry out policies that are entirely 'dictated' by the forces of economic globalization, that is the needs of producers and workers in the domestic exporting sectors (for example, in developed countries, the demands of high-skilled laborers) and the demands in the importing markets abroad.

Irrespective of the ideology of the ruling party, under the pressures of globalization any government may be forced to deregulate labor markets, to cut taxes and welfare spending, and to let domestic capital flow freely into more lucrative investment projects abroad. Expressed with the words of Garrett (1995, p.670): "From a neoclassical perspective, the ability of the left and organized labor to [pursue leftist policies such as to] increase government spending, tax capital heavily, and pursue expansionary fiscal and monetary policies would decrease with exposure to trade and capital mobility". Nevertheless, I also argue that this statement is equally true for certain policies preferred by more conservativeminded voters: for example, opening up domestic markets forces domestic industries to pay competitive wages, reducing the premium on male labor ('positive discrimination'), and to employ only the most productive workers, causing a higher female labor force participation (e.g. Becker, 1957/1971); both changes result then in the destruction of the traditional role model in society. In addition, already the decision to pursue a policy of trade openness constrains both left-wing and right-wing domestic governments likewise, as such policy requires macroeconomic stability, in particular a low level of inflation - with all its labor-market, dept-related and distributional consequences (Bhagwati and Srinivasan, 2002).

Taken altogether, economic globalization imposes an strictly binding economic constraint on national government's discretionary power over domestic politics, forcing her to accept exogenously imposed economic adjustment processes and to pursue policies that may not be consistent with her (less binding) political ideologies. Consequently, globalization lets national governments seemingly lose steering power over the domestic economy.

4. Outlook to the future of domestic policy-making

The previous discussion has provided evidence that the transformation of the domestic economy induced by globalization pressures politicians (partly channeled by the lobbying of the affected socio-economic groups) to pursue certain policies; these pressures may become so strong that their own ideological constraints become less binding. A prominent real-life example is that of left-wing pro-worker governments that are forced to deregulate labor markets and to relax workers' employment protection (Fischer and Somogyi, 2011). In the short-run, domestic governments may well try to compensate and counteract certain ongoing structural changes in the economy; for example, the shrinking of the mining sectors in Europe and of the agricultural sector in the US had been combated through subsidies - which kept labor costs of production artificially low. We have seen, however, that, in the long-run, such counteracting policies cause more inefficiencies than benefits and are, therefore, economically not sustainable – in the very end, both left-wing and right-wing governments likewise will prefer to put those subsidies to an end. Particularly in the light of limited government budgets, opportunity costs of non-sustainable subsides are high, as these financial resources could be more wisely invested in public goods for use by the economic sectors with a (potential) comparative advantage in the world market.

The role of human rationality

What would a sensible government policy in a globalized economy then be? Where are its limits? What governments cannot change is human behavior as such – that is the maximization of benefits from economic activities (be it gainful employment or profit-generating production). Human beings will therefore always seek the most profitable investment opportunity, take the cheapest offer (of otherwise homogenous consumption goods), choose the job that pays the highest wage. By this rational human behavior, we all

consumption good induces pressure on producers to cut production costs through dismissal of (more costly) older workers, seeking the best investment projects forces firms to lobby for lower tax levels and labor market deregulation, taking the job with the highest net wage pressures local governments to cut down income taxes and welfare state spending, etc. Moreover, young, male investment-bankers' choice of assets is most possibly also driven by their high level of testosterone – which makes them far less risk-averse and less patient compared to the average population (Coates and Herbert, 2008, Stanton et al., 2011). Consequently, these also personally competing young men, then turning almost risk-neutral, invest in highly volatile assets promising higher returns, and exploit marginal price differences between millisecond in stock markets – with the final consequences of exaggerated volatility, market destabilization and, possibly, financial crises. Taken altogether, the mechanisms on which the pressures of globalization arise from are in-built in our human nature and cannot be eradicated.

So what is then left as policy for the domestic government? We recognize now that certain structural changes triggered by globalization are inescapable and unstoppable – they will occur irrespective of domestic governments' political preferences and generate social and financial 'pain' for certain socio-economic groups that are now forced to undergo a process of adaptation. However, within certain boundaries, governments can channel these changes, smooth certain transition processes, and influence the speed of the adaptation of the national economy. Thus, national governments in wealthy countries may be able to compensate the 'losers' of this transformation process: for example, they can afford unemployment benefits for dismissed workers in the shrinking sector and finance their acquisition of new, nowwanted skills. Furthermore, government may provide limited subsidies (e.g. tax exemption) to start-up enterprises and the founding of new industries in the growing exporting sector.

Possibly, to some extent government ideology will have an influence on the choice of compensation schemes and instruments to smooth this adaptation process in the domestic economy.

Globalization, however, does not exempt domestic governments from their traditional role as public goods-provider, tax-levier and rule-setting regulator (Blankart, 2003; Musgrave 1959): thus, globalization and letting its forces work does NOT imply neo-liberalism in the economy as a whole. In general, government intervention in the market economy is needed wherever market failures occur. Such classical failures include external effects such as pollution of the environment, the underprovision of public goods through private actors (infrastructure, army, public education), but also information asymmetries in markets (e.g. of so-called experience goods). In contrast to the traditionally closed textbook economy in which consumers and producers are located in the same country, remedying market failures may become more complex in a globalized economy. For example, foreign goods may be produced with a technology that pollutes the environment abroad/worldwide - reducing the production costs compared to a (possibly) domestic good that satisfies domestic anti-pollution laws. Classical economic theory now predicts rational, selfish local consumers to buy the cheaper, otherwise homogeneous foreign product (this prediction may be different if we assume strong otherregarding preferences, e.g. Fehr and Schmidt, 1999)³⁰; consequently, high domestic demand for the foreign good causes a level of pollution that is not pareto-optimal abroad/in the world, while the environmentally-friendly, but more expensive domestic good faces a market demand of zero.31 Without (domestic) government intervention, the more expensive local producer leaves the market, while the foreign producer survives, overally increasing worldwide pollution (Copeland and Taylor, 1994).

4.1. Externalities

Analogous examples of social and environmental externalities generated abroad in the exporting sector hold for goods that are produced with a lower standard as compared to the country they are exported to – be it under a low employment protection scheme, child labor, under violation of human rights, with discriminatory practices, without a minimum wage, a limited to non-existing welfare state, and/or without any type of social or health insurance. All these practices serve to artificially lower the costs of (labor-intensive) production and to, from the view of the importing country with higher standards, to swamp markets with goods at dumping prices (Busse and Spielmann, 2006). Overall, without domestic government intervention, so the public's fear, the inflow of such goods into the domestic market will either drive domestic firms into bankruptcy or induce a world-wide race to the bottom in terms of labor protection and welfare state generosity (Fischer and Somogyi, 2012; Dreher and Gaston, 2007, Sinn, 2001).³²

In order to preserve certain social and environmental standards in the importing society, domestic governments may choose to intervene in their national goods markets so that foreign produce is sold at a price that internalizes the social and environmental externalities under which they had been produced abroad. Means for internalizing such labor/environmental standard and human rights externalities that occur abroad may include traditional trade policy instruments in the importing country applied to specific goods (quotas, tariffs), but also traditional externality-correcting public choice instruments such as Pigouvian taxes (Pigou, 1928) and licenses (as currently applied in international Climate-preserving CO2 reduction policies), as well as norm-setting ('rules of the game') through international treaties on labor standards/human rights in general (e.g. ILO convention).³³ In case of environmental damage, an alternative instrument to combat pollution is the government-induced transfer of clean production technologies (Copeland and Taylor, 1994). Briefly turning to the example of the

selfish, young, risk-neutral male traders acting in the financial markets, a small transaction tax large enough to neutralize arbitrage gains of course volatility between two milliseconds and the prohibition to speculate with assets connected to essential goods (water, food, etc., see also section 4.3.) will substantially contribute to calming down of international financial markets and prevent future externalities of their economic activities on societies worldwide.

4.2. Information asymmetries

The classical task of governments to regulate markets through providing institutional frameworks persists in a globalized economy also with respect to information asymmetry; in fact, most of financial crises were partly caused or at least acerbated due to unresolved information asymmetry problems about products or the actors who sold them. Similarly, it may be difficult for the domestic consumer to assess the quality of a good that has been produced abroad under technological and social circumstances unknown to her. In classical textbook-models of a closed economy, governments may choose, for example, to introduce labels which signal quality, based on tests run by some national, independent public agency. In history, some of these agencies have been founded by concerned consumers themselves (originally as type of club good), or by national governments, for dissemination of quality assessment to the public (as public good). In a globalized economy, particularly with a view on the financial market, past history of financial market crashes has revealed the need for such independent agencies which assess the quality of financial products or of their sellers (e.g. Guiso et al., 2010, on trust information asymmetries across banks). Similarly, for traditional consumption and intermediary goods, international agreements on common technical standards and quality checks equally serve the purpose of combating information asymmetries regarding the foreign import (or its subjection to national testing agencies prior to admission to the domestic market). Independence of quality-assessing agencies particularly from the sellers' side (who have an incentive as rational profit-maximizers to disguise the true (low) quality of their products), but also from the government itself (which equally acts as seller on good and asses markets), ensures that the information provided to buyers is accurate and credible. Thus, combating information asymmetries between sellers and buyers in world markets is another classical government task which gains new importance in the era of globalization.

4.3. Public provision of essential goods

Finally, globalization also underlines the importance of the classical, 'public goods'-provision task of domestic government: Often, globalization was paralleled by privatization of formerly public industries – privatization lowers government spending and forces these newly private firms to produce at competitive costs, from which also the common citizen profits, so the usual arguments (Stiglitz, 2002). However, privatization shifts the managers' goal from pursuing a purely cost-covering production to running a profit-maximizing enterprise instead - consequently, unprofitable branches are simply shut down, leaving some citizens without supply. Furthermore, profits generated in one country were often used to finance market expansion into other countries – triggering rising prices for citizens at home. In addition, these competing formerly public firms, usually of already a large size, have a strong incentive to form oligopolies in order to avoid competition and to exploit their joint market power. Recent examples include the electricity, train and postal systems, but similar observations are made in water supply and grain production. Finally, the products of these newly privatized firms became now, like any other good in the world, subject to the speculation of traders, causing a high volatility in world market prices – possibly causing suffering and death in developing countries (see section 4.1.). In sum, most privatization policies in Europe and other parts of the world appear to have failed: these privatized firms generated highly concentrated national or regional markets, with prices for consumers often having quadrupled ten years after privatization (e.g. Stiglitz, 2002). Obviously, while, in general, globalization creates competitive pressure through granting access across national markets, it does not so in most parts of the formerly public sector.³⁴ Thus, the classical government task to organize and control the supply of essential goods such as water, electricity, infrastructure and staple food remains and grows in importance in a globalized economy.

5. Conclusion

This paper uses predictions of theoretical models of trade and empirical evidence thereof to build an argument that economic globalization triggers unavoidable economic consequences and adjustment processes for the domestic economy. Moreover, I argue that, going beyond a purely 'disciplining effect' (Cai and Treisman, 2005), globalization constrains governments' policy choice set in general, possibly to an extent that actual policy choices are mainly ideology-free, rather being driven by the demands and needs of investors and domestic producers in the highly-profitable exporting sector. However, I also highlight the policy challenges that persist - mainly the classical government tasks of regulating the economy in the presence of market failures (externalities, information asymmetries, public goods, see Musgrave 1959), arguing that these classical tasks become even more imperative as countries start globalizing.

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¹ Parts of this article are based on the working paper "Globalization and Political Trust", NCCR Working Paper No. 2012/05.

- ³ In general, the literature has not reached consensus on how globalization affects government spending. It may well be argued, and some empirical evidence points in that direction, that governments redistribute more to certain groups or protect some groups stronger than others as its economies globalize, possibly to appease the losers from this development or simply because of their lobbying power (Bretschger and Hettich, 2002; Fischer and Somogyi, 2011; Garrett 1995, 1998; Hicks and Swank, 1992; Huber and Stephens, 1998; Rodrik, 1998). In contrast, Dreher, Sturm, and Ursprung (2008) and Dreher (2006) do not find globalization to affect government or social spending.
- ⁴ See Schulze and Ursprung (1999) for a review of the early literature on the effect of globalization on social and welfare spending.
- ⁵ In principle, technological spill-overs across countries could cause a reversal of the current patterns of specialization, in case they more-than-neutralize the sector-size dependent learning effect.
- ⁶ Felbermayer, Prat, and Schmerer (2011) show empirically that, at least in OECD countries, in the long-run increased openness reduces unemployment. This finding contradicts textbook predictions that trade openness had no long-run effect on unemployment; Krugman (1993, p.25) states: "Trade policy should be debated in terms of its impact on efficiency, not in terms of phony numbers about jobs created or lost." However, some modern trade theories predict an increase in long-run unemployment, possibly through frictional unemployment, minimum wage, or segmented labor markets (as in developing countries) (e.g. Baghwati and Srinivasan, 2002; Brecher, 1974; Davis, 1998; Egger and Kreickemeier, 2009; Helpman and Itskhoki, 2010).
- ⁷ See Burtless (1995) for an in-depth discussion of labor market models with free trade to explain increasing wage inequality.
- ⁸ Implicit evidence for growing wage inequality can be drawn from Blanchflower et al. (1996) who show that wages grow overportionally as profitability of firms rise. The empirical evidence on income disparities in place of wage disparities is more ambiguous (e.g., Dollar, 2002; Dreher and Gaston, 2006).
- ⁹ The literature employs the revealed comparative advantage index which is based on sector-specific export shares. For a description, see Balassa (1965) and Vollrath (1991).

² In traditional theories of trade, the production factor labor is assumed to be immobile, while capital is assumed to move easily across countries (Krugman and Obstfeld, 2011).

http://ec.europa.eu/trade/creating-opportunities/economic-sectors/agriculture/, downloaded 26th December 2011).

¹⁰ Source: http://www.eurofound.europa.eu/eiro/2009/11/articles/lv0911029i.htm (download: 28th December 2011)

¹¹ This may exclude very specialized industries producing high quality products, possibly luxury goods, e.g. high quality clothing and textiles, or high quality processed farm products, such as premium olive oil (see, e.g. http://ec.europa.eu/trade/creating-opportunities/economic-sectors/industrial-goods/textiles-and-footwear/,

¹² Notably, this is the view of developed Europe, Japan, and the US. ILO (1996) also states that shifting the production to developing countries created jobs in these economies. For example, during the same period, sectoral employment rose by 33% in Turkey and by 85% in China.

¹³ Source: http://www.spiegel.de/international/0,1518,463172,00.html (downloaded 26th December 2011).

¹⁴ In 2007, the German subsidies for mining amounted to 2.7 billion Euros. Source: see preceding footnote.

¹⁵ "The domino pattern indicates that global crashes, which can hardly be diversified, do not occur abruptly but rather evolve out of prior local or regional crashes" (Markwat et al., 2009, p.1997).

¹⁶ Forbes (2004) proves the existence of the trade channel by showing that exporting firms are hit stronger by international financial crises than firms producing for the domestic market. Focusing exclusively on the occurrence of currency crises, Haile and Pozo (2008) find a dominance of international trade linkages over having common lenders.

¹⁷ Lazear (2011) views the 2008/09 and the 2011 crises as 'popcorn effects' rather than 'domino effects'. Edison et al. (1998) present a theoretical model explaining the domino effect in the 1998 Asian financial market crisis. See Kahn and Park (2009) for more empirical literature on contagion effects between 1987 and 2009. The Mexican crisis spilled over so far that the IMF provided financial assistance also to neighboring Latin American countries (Ito, 2007).

¹⁸ For a comprehensive summary, see e.g. http://cashmoneylife.com/economic-financial-crisis-2008-causes/ (28th December 2011). Spill-over to European banks occurred because they had bought large bulks of those mortgage backed securities, often after decennials of fighting against national bank regulation laws that restricted investment in risky (but potentially more profitable) business.

¹⁹ The Maastricht criteria allow a maximum of 60% of GDP only.

²⁰ A 'wake-up-effect' lets investors check the creditworthiness of countries with characteristics similar to the country first in financial difficulties, in this case Greece (see Forbes, 2004).

²¹ The lowering of the PIGS-countries ratings of creditworthiness is a rational consequence of their governments' imprudent economic policy making, on the one hand, but also partly because of the many ,old' government debts originating from the US mortgage market crises in 2008-09.

- ²² According to Alessi (2011) Greece received a \$163 billion loan in May 2011 and a second bailout package (that included a haircut) worth \$178 billion.
- ²³ Davis and Stone (2004) provide an enumeration of banking and currency crisis episodes in developing and developed countries between the 1970ies and 2000.
- ²⁴ Higher inflation as predictor of exchange rate change particularly occurs in emerging economies (Ito, 2007).
- ²⁵ As reported by the Hellenic Statistical Authority (http://www.statistics.gr/portal/page/portal/ESYE), press release of 8th December 2011.
- ²⁶ Unemployment rates have been obtained from Eurostat

 (http://epp.eurostat.ec.europa.eu/portal/page/portal/eurostat/home) (29th December 2011).
- Under strict model assumptions, predicted positive effects of economic globalization include higher overall welfare, optimized consumption patters, higher rents of production factors in the exporting sector (e.g. higher wages for low-skilled in developing countries), higher levels of general employment, and higher overall growth (e.g., Bhagwati and Srinivasan, 2002; Davidson et al., 1988, 1999; Egger and Kreickemeier, 2009; Felbermayer et al., 2011; Mehlum et al., 1996; Krueger, 1983; Krugman and Obstfeld, 2011; Srinivasan and Bhagwati, 2001; for supporting empirical evidence, see, e.g., Bhagwati and Srinivasan 2002; Dollar, 2001; Dollar and Kraay 2004; Felbermayer et al., 2011; Frankel and Romer, 1999; Krueger, 1983). However, many empirical studies also reveal strong distributional conflicts and biased within-sector technological progress (Deaton and Dreze, 2002; Srinivasan and Bhagwati, 2002).
- ²⁸ In explanation these effects, Cotates and Herbert (2008) argue that "testosterone [...] have receptors throughout the brain region identified in neuroeconomic research as contributing to irrational financial decisions" (p.6170)), high levels of testosterone were also found to lead to impulsivity and sensation seeking (Daitzman and Zuckerman, 1980).

Brañas-Garza and Rustichini (2011) show experimentally that, in addition, testosterone levels also positively correlate with abstract reasoning ability.

²⁹ The fact that traders and investment bankers also compete on a personal level with each other may cause an additional rise in testosterone level, in analogy to what has been widely observed for sports competition (for a review, see Booth et al., 2011).

³⁰ Other-regarding preferences include forms of altruism and inequality aversion – which may be summarized as 'moral or cooperative behavior' in non-economic social sciences. Economists, in general, expect weight on the self-regarding utility component to be larger than that on the other-regarding component.

- ³¹ This is the theoretical prediction and the public fear. The empirical analysis by Antweiler et al (2001) suggests that international trade has no effect on the level of pollution worldwide.
- ³² In contrast, Dreher et al (2012) find that economic globalization fosters human rights probably with economic growth and national wealth as its transmission channel.
- ³³ For a discussion on international treaties as means to protect such standards in a trade context, see Bürgi-Bonamoni (2012).
- ³⁴ One reason for the lack of competitive pressure are the market entrance prohibiting sunk costs of production (e.g. the electricity grid, trains, water pipes, etc.).