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Fighting the Debt Crisis' Undertow:
Greece and the Eurozone

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Abstract

To measure the debt crisis in Europe in general, and in Greece in particular, there are different levels of analysis, rarely examined together: at the global, EU and the national levels. The global level involves the origins of the crisis in the infra-regulated practices of financial entities worldwide, whereas the EU level reflects architectural weaknesses of the European Monetary Union. The national level entails specific vulnerabilities of the national economy. Underlying all this, there has been a total (public+private) debt bubble that has been growing since the 1980s, and an implicit promise of higher standards of living through large market deregulation experiments (chief among them are capital markets and capital mobility deregulation). Delivering on this implicit promise called for an increasing assumption of debt. This was based on the hope that growth in the real economy would justify increasing debt—in a sense outrunning debt growth. Unfortunately, not only did debt growth prove to be too rapid, the growth of finance ended up attracting grey matter away from science and technology, the ultimate productivity-growth booster, and giving finance the grey matter to engineer ever-cleverer ways to raise debt. In some countries, debt growth could be reflected more on the side of private debt (Spain, UK, US, Ireland, etc.) or public debt (Greece, Italy, Portugal), or both, but that distinction is secondary. The key point when it comes to the global level of analysis is that incomes and consumption growth ended up being achieved through practically continuous debt (public and/or public) growth.

1. Introduction

The persistent long shadow of the debt crisis and its handling is not only exacerbating a diminution of the middle class across Europe and beyond, it is also showcasing internal contradictions in both theoretical as well as policy terms, which provide fertile grounds for analytical work. We will propose a framework for examining this issue and to hopefully encourage further analytical work, drawing on evidence from Greece, which may also be applicable to other countries facing a similar situation.

To measure the current and ongoing debt crisis in Europe, there are different levels of analysis and policy approach, which are rarely examined together; generally speaking, there is a global level, a European one, and a national one. The first two levels of analysis and policy response mentioned above, correspond to the global level, i.e. the origins of the crisis in the infra-regulated practices of financial entities worldwide, and at the level of the

European Union (EU), i.e. architectural weaknesses of the European Monetary Union (the EMU or the euro, in short).

At the global level, there has been a total (public + private) debt bubble that has been growing since the 1980s, and an implicit promise of higher standards of living through large market deregulation experiments (capital markets deregulation and capital mobility being chief among them). Delivering on this implicit promise called for an increasing assumption of debt. This was based on the hope that growth in the real economy would justify increasing debt—in a sense outrunning the hare of debt growth. Unfortunately, not only did debt prove to be a very rapid hare, the growth of finance ended up attracting grey matter away from science and technology, the ultimate productivity-growth booster, and giving finance the grey matter to engineer ever-cleverer ways to raise debt.

In some countries, debt growth could be reflected more on the side of private debt (Spain, UK, US, Ireland, etc.) or public debt (Greece, Italy, Portugal), or both, but that distinction is secondary. The key point when it comes to the global level of analysis is that incomes and consumption growth ended up being achieved through practically continuous debt (public and/or public) growth; in western countries debt grew roughly from 160% of GDP in the early 1980s to 320% thirty years later.

Indeed, one of the concerns emerging in the current economic context is that the debt-fuelling growth machine is becoming less and less efficient; these days, it takes more debt to generate the same growth impetus than in the past (the 'getting-less-bang-for-the-buck' issue).

In what follows, we will focus mostly on aspects emerging from the interaction of different levels of analysis.

2. Different Levels of Analysis and Policy Response are emphasized in different quarters

Within countries hard-hit by the crisis, the emphasis is usually on aspects/traits of the local economy that are blamed overwhelmingly for the crisis.

This is not only wrong, since it ignores the other two (European and global) arguably more important levels mentioned above, it is also counter-productive because it leads to strategies/policies that fail to win popular support, because they place the practices of large system-driving players and the average nameless citizen behaviour at the same level, in a sense mixing crimes with misdemeanours. The majority of the population, which never felt being in the driver's seat, and has been adapting reactively to patterns established elsewhere, both before and during the crisis, sees this as a 'blame the victim' approach, and is reticent to support even simple, non-ideological, 'clean-house' initiatives.

In a sense, the zero-tolerance mentality that was presumably applied in several cities on both sides of the Atlantic since the nineties, to address violent crime and criminal-court delinquency, is being blindly applied to economic practices. A key social point here is that whereas high-level violent crime barons are not role models (at least not in any of the countries hit by the European debt crisis), those wealthy players, who amass and preserve their wealth by bending/breaking economic behaviour laws, are trend-setting role models. They enjoy high status, are well known, respected locally or nationally, and are the ones whom many of their fellow citizens look up to or regard with envy. In any case, unless zero-tolerance implementation begins with the largest fish in the pond, before catching the smaller fish, the policy will not be backed by the majority and will ultimately fail.

> *"Wealthy players, who amass and preserve their wealth by bending/breaking economic behaviour laws, are trend-setting role models. They enjoy high status, are well known, respected locally or nationally, and are whom many of their fellow citizens look up to or regard with envy."*

The blame-the-victim (and/or self-flagellation) approach has another unintended 'asymmetric' consequence. The facile criticism of high corruption levels in the hard-hit countries takes hold, both within those countries, in terms of collective self-image (and self-respect, social trust and social capital, more generally), and also in the wealthier member states, in terms of stereotypes of lazy, corrupt southern societies siphoning off resources from the self-perceived 'virtuous' hard-working north. These stereotypes are not true—Greeks, for instance, work notoriously longer hours than their northern fellow Europeans, though systemic/infrastructural weaknesses keep their productivity down, as the UK Office for National Statistics indicates.* However, stereotypes sustain and nourish resentment, tensions and ultimately centrifugal forces in the EU.

An understanding of more profound structural aspects would debunk other myths about corruption proclivities too. The most central and frequently mentioned includes tax evasion. Tax evasion is indeed a more serious problem in southern European countries than in countries in the north. The frivolous conclusion to which one may jump next is to suggest that this implies higher intrinsic propensity for corruption in the south. Closer inspection however reveals that rather than some innate, intrinsic propensity for corruption in the south, what one has is a much higher incidence of self-employment in the south, than in the north. In other words, it is not that southern societies per se are more prone to tax evasion, they simply have a larger part of the economy devoted to self-employment activities. Thus, tax-evasion can flourish in any country in the world, north or south. It is much more difficult to see salaried employees evading tax in any country, regardless of their moral fibre. The strikingly higher percentage of salaried employees in northern countries is the secret behind their tax-compliance.

More specifically, and focusing on the case of Greece, non-salaried incomes there represent multiples of their counterparts than in the rest of the EU. The self-employed account for more than 40% of the workforce in Greece vs. 16% in the EU27, according

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* See "Hours Worked in the Labour Market" 2011 *Office for National Statistics* http://www.ons.gov.uk/ons/dcp171776_247259.pdf

to Negreponti-Delivanis, Economics Professor at the University of Thessaloniki. There lies the root of high and persistent tax evasion and tax avoidance—indeed, economist Nick Caldor had identified such cases as requiring reduced emphasis on income tax and increased emphasis on progressive consumption taxes (Negreponti-Delivanis, pp. 122-123, p. 280).

Another key structural asymmetry can be seen in the weight of consumption in total GDP, which is very high for countries such as Greece and Italy (higher than 70% in the case of Greece)—investment and exports being less weighty than in other EU countries. This implies that an 'internal devaluation' adjustment program, such as the one imposed on Greece, will be much more painful there, because it undercuts the main pillar of economic activity, than it would in other circumstances, and the loss of output and jobs is concomitantly higher.

Related to the above, these adjustment programmes are largely export-focused, and may work reasonably well for countries with a strong export base that have suffered a setback, and aim to recapture or maintain export markets, building on existing strengths and brand recognition. It fitted and worked well, expectedly, in the case of Germany and Ireland. It is less suited to cases of chronically low export performance, where large markets must be built from scratch, usually an expensive and long-term exercise. Greece has a relatively low export contribution to GDP (approx. one fifth of GDP for Greece, vs. more than half of GDP for Germany). And even though Greek labour costs have been reduced drastically, Greek exports did not see an important boost for much of the long adjustment programme period, and only truly picked up in 2017-2018. This tardiness surprised those who downplayed these asymmetries between the cases of countries with a strong exports base, such as Germany and Ireland, and countries with a weak exports base such as Greece.

Besides asymmetries, we also observe cases of logical incongruence. A logical incongruence between avowed intentions and consequences is that internal devaluation programmes lead to emigration of skilled individuals, and innovative firms that seek easier access to finance and lower taxation elsewhere. There is a clear danger in shifting the exports profile towards cost-based competition to emerging economies that provide low-skilled labor and low knowledge-input for manufacturing homogeneous goods. This is a situation in which no EU country wants to find itself, and this is a competition in which any victory can only be Pyrrhic.

Moreover, adjustment programmes that base in general much of their promise of future growth on attracting private investment underestimate two elements: first, that public investment (clearly cut back through the adjustment programmes) may be a necessary catalyst/prerequisite for private investment. Second, the adjustment programmes are implicitly conceived for single-country environments, where investors face a binary decision to invest or not to invest, as if there were a pool of 'quasi-earmarked' resources waiting to be invested in the adjusting country, as long as a set of reforms are made. The reality of course is that investors have many more options available, and a very wide array of 'reforming' countries competing for their attention and resources. In other words, one may introduce all the prescribed reforms and still may not enjoy the hoped-for investment, and be wooed by countries with ever more investor-attractive environments.

In countries like Greece, the very effective imports penetration consolidated in the pre-crisis years, coupled with the huge weight of domestic consumption in GDP, have nourished a productive system, which is sectorally thin. Exacerbating the impact of the above, there is a chronic exports underperformance. When your products are very expensive in world markets, you can either improve their quality and differential characteristics, for which innovative human capital is crucial, or you can choose austerity paths that bring down real costs, since nominal depreciation is not available.

> *"The atavistic fear of inflation which has led to a European Monetary Union (EMU) architecture and a European Central Bank (ECB) charter that was created in the 1990s to fight the inflation wars of the 1970s is ill-prepared to fight the Great Recession and sovereign debt wars of this century."*

The problem here is not only the formidable low-cost global competitors, but also the massive human capital flight and the defanging of productivity issues that this approach entails.

At a higher policy level, there are incongruences identified from the beginning between adjustment programmes and regional development approaches—such as the very promising smart specialisation strategy (S3) approach adopted by the EU for the 2014-2020 structural funds cycle. Adjustment programmes incongruent to S3 approaches are behind both persistent unemployment and the resulting worrisome human capital trends. Reports bring the number of Greek emigration (including graduates) to six-digit figures—more than 400,000 according to 2016 reports, which is large for a country with a population of 11 million.[*]

Unfortunately, it does not bode well for the Greek economy/society in crisis, as most do not plan to return, and they are absent at a transformative juncture for the country that has shouldered the cost of their preparation for the first couple of decades of their lives. Moreover, the situation identified above renders fallow the central ground for the reception, absorption, and development of innovation, and defangs local productivity issues, making networking, clustering, value-chain insertion, etc. ever more difficult.

Part of the reason for the above is an interesting pattern in adjustment lending that is rarely reported—indeed the impression given in the media is exactly the opposite to what the figures tell: that most of the money lent through adjustment programmes did not address hardship or growth rekindling. For example, between 2010 and early 2014, the official lenders (ECB, EFSF_ESM and the IMF) lent Greece more than 200 billion. More than 77% went directly or indirectly to the financial sector. Attac calculates that €58.2 billion (28.13%) was used for bank recapitalization, while 101.33 billion (49.98%) went back to the lenders to

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* See https://greece.greekreporter.com/2016/07/02/economic-crisis-marks-3rd-emigration-wave-of-greeks/ which refers to the internal Bank of Greece results

pay back maturing bonds.* €34.6 billion was used to 'convince' private lenders to accept the Private Sector Involvement (PSI) 'haircut'. €11.3 billion was used for debt buybacks by the government from private lenders. A small part of €43.7 billion (22.46%) actually went for other purposes, including the coverage of budgetary shortfalls.

"The architecture of the EMU requires a deep rethink, because asymmetric shocks (and not only those triggered by debt crises) can wreak havoc on it otherwise."

Note here that before the so-called PSI 'haircut' in 2012, 62% of the Greek debt was in private hands; after the PSI process only 27% was (and more than 70% got into the hands of official creditors, such as states, the ECB, the IMF). Note also that the ECB is making a profit from Greek bonds that it bought at huge discounts, as if it were a private, for-profit bank (while having obliged pension funds to lose 50% of their investment worth in public bonds in the aforementioned PSI process). These 'profits' were promised to be returned to Greece back in 2012. They are very slowly, and only recently, beginning to gradually find their way to Greece.

There is a profound logical-temporal incongruence that is behind much of the above: the atavistic fear of inflation which has led to a European Monetary Union (EMU) architecture and a European Central Bank (ECB) charter that was created in the 1990s to fight the inflation wars of the 1970s (and some will say even the 1920s) is ill-prepared to fight the Great Recession and sovereign debt wars of this century. Testament to this misplaced fear of inflation and the outplaced inflation-mongering is the fact that the US Federal Reserve has been pursuing extremely lax monetary policies since 2007, unemployment has dropped drastically, and inflation has not reared its head in the US.

The reasons for the absence of fear of inflation are also not hard to see for anyone not stuck in the seventies: unions do not have the power to demand/impose wage hikes to feed inflation, and new cheap producers and economic powerhouses in Asia easily flood western markets with inexpensive goods, stopping western producers from even flirting with raising prices, as they did in the seventies.

As we will see later, the architecture of the EMU requires a deep rethink, because asymmetric shocks (and not only those triggered by debt crises) can wreak havoc on it otherwise.

Political and institutional aspects of what is at stake may be even thornier, according to a striking July 2013 JPMorgan report suggesting that part of the problem for southern Europe is constitutions that were informed by the nefarious fascist experiences either during World War II and/or in dictatorships in the following decades, establishing strong institutions and

* See www.attac.at/up-loads/media/backgroundmaterial_bailout_english.pdf

rules against such phenomena. According to this view such strong counter-fascist institutions are an impediment to reforms![*]

> *"Waves of emigration of young scientists have been observed in the context of adjustment programmes, and the fear is they may not come back easily, even when the economy finally picks up."*

3. Statistics Placing the Crisis in Perspective

Let us provide a few indicators that will place the Greek crisis specifically in perspective. Greek GDP went from €231 billion in 2009 down to €184 billion in 2013—debt was at 120% of GDP in 2009, and rose to 176% in 2013. The average tax burden rose by 52% during that time. A small primary surplus was achieved in 2013 (earlier than expected), and a similar one was estimated for 2014—largely thanks to government delaying at will its own payments to suppliers, and thanks to unforeseen tax-patriotism by citizens, who cut down everything else to pay increasing taxes. (Negeponti-Delivanis, pp.128-9). The budget has moved firmly in primary surplus territory in the last couple of years, achieving the draconian surpluses dictated by lenders, thanks largely to both tougher enforcement and a shift to non-cash forms of payment.

Between 2008 and 2013 investment dropped from €56 billion to €23.6 billion, and exports dropped from 56.2 billion to €53 billion (op.cit. p. 139).

Although it has eased in recent years and is down to 19.1% in June 2018, the official unemployment rate reached 27% in Greece in the darkest moments of the crisis. In terms of families/households, 550000 families are without any wage-earning member, comprising 1.5 million unemployed people approximately. For those working, the minimum monthly wage has been reduced by decree by 22% or even by 32% (from €751 down to less than €500), depending on the age of the worker. Not surprisingly, more than 3 million people came to live below the poverty line, with 7 out of 10 not able to afford heating oil during the winter (Negreponti-Delivanis, p. 39-41), and in many areas of the country between one-thirds and half of the stores/businesses have gone out of business (op. cit. p. 249). Since the onset of the crisis, life expectancy has dropped by three years (op. cit., p. 119-124). Seven out of ten youths indicate they look to emigration as a solution (p. 249, op. cit.). Suicide rates went up by 35% after the onset of the crisis.[†]

Moreover, more than a third of total employment is estimated to be uninsured (the corresponding social security contributions are not made). In other words, the relevant labour laws are not respected under the threat of discontinuation of employment. This has been exacerbated due to the reduction in public inspection services staff. As in other crisis-hit countries, the other side of this coin is part time jobs, wherein new hires are registered and paid for part-time work but made to work full time; 20% of all employment contracts

* See http://www.constantinereport.com/jp-morgan-to-eurozone-periphery-get-rid-of-your-pinko-anti-fascist-constitutions/

†Efimerida twn Syntaktwn, front page reporting on a study by the University of Thessaly medical school, 31/3/2015

are part-time, 50% of new hires are part-time (unpublished new data—informal communication). The damage here is multi-fold: not only do they receive half-pay, they are also credited with half-day's work towards their retirement benefits. The longer this goes on, the harder it is that they will meet pension eligibility, when they reach pensionable age. Furthermore, the already dire straits faced by pension funds become even worse as the social security contributions those funds receive correspond to part-time contract, and not to the real full-time schedule. (Negreponti-Delivanis, pp.39-41).

"Adjustment programmes have generally raised inequality in areas they have been applied."

It is easy to see how in this context, any source of income will be zealously guarded, as will the possibility to keep as much of it out of sight, particularly vis-a-vis fiscal authorities. This makes self-employment and small family-owned firms increasingly attractive, undermining the adjustment programme's vision of reducing self-employment. It makes family (often an extended version of it going back to living under one roof due to job loss, etc.) the relevant unit of decision-making, as opposed to the individual, as the adjustment's logic would have preferred. Adjustment programmes prefer the assumption of individualistic, atomised human existence; individuals conform to single human agent models underpinning standard economic models, and they cannot hide behind families, when dealing with fiscal, administrative or judicial inquiries/decisions. However, it is hard to be individualistic when the pension of grandparents is what three generations live on. The reassertion of the importance and the protection of the hearth reaffirms other cultural parameters that go against the grain of adjustment programmes—for instance, social/peer pressure is strong in that people will not bid in foreclosure auctions that would take a family's home or shop away from them (recently, to counter this, faceless digital auctions have been introduced).

We have already seen above how the traditional emphasis on education—implying higher wage expectations, and more demanding citizens and economic agents—is not sacrificed in favour of accepting any job/salary that would help bring the country to compete with countries at lower levels of income/development. Instead, waves of emigration of young scientists have been observed in the context of adjustment programmes, and the fear is they may not come back easily, even when the economy finally picks up.

4. The Inequality Issue and the end of the Cosy Equality vs. Efficiency Trade-off

Adjustment programmes have generally raised inequality in areas they have been applied. In the case of Greece the numbers are particularly striking: one study shows that the poorest households lost nearly 86% of their income, while the richest lost only 17-20%. The tax burden on the poor increased by 337% while the burden on upper-income classes increased by only 9%. This is the result of a study that has analyzed 260.000 tax and income data from the years 2008-2012 (Giannitsis, T. and Zografakis, S.)*

* Forthcoming, commissioned by the German Institute for Macroeconomic Research (IMK) affiliated with the Hans Böckler Foundation http://www.boeckler.de/pdf/p_imk_study_38_2015.pdf

According to this study, the nominal gross income of Greek households decreased by almost a quarter in four years; the wage cuts caused nearly half of the decline; net income fell further by almost 9 percent, because the tax burden was significantly increased; while all social classes suffered income losses due to cuts, tax increases and the economic crisis, particularly strongly affected were households of low- and middle-income, due to sharp increase in unemployment and tax increases that were partially regressive.

"The difficulty in rekindling robust sustained growth, through traditional mechanisms of credit flows (the savings-investment-consumption pump), is linked to high and increasing income inequality."

This should be placed in a wider context in which, globally, 8% of the world's population controls more than 80% of total wealth, while the poorer 70% control little over 3% of global wealth. Since the crisis, things have become even more skewed: since 2009, 60% of growth has been captured by the highest earning 0.1% (Negreponti-Delivanis, p.42).

It is evident that the middle class would suffer in any austerity programme. However, in the case of adjustment programmes imposed in the context of this crisis, in the south of Europe, and particularly in Greece, their vicissitudes are exacerbated, as the theoretical assertion and cherished past evidence on a trade-off between equality and growth are proving to be wrong; you can have both shrinking in tandem, and we need to rethink our understanding of the interaction between the two thoroughly. It is becoming clear (even to institutions/publications a priori least likely to accept such a proposition) that the difficulty in rekindling robust sustained growth, through traditional mechanisms of credit flows (the savings-investment-consumption pump), is linked to high and increasing income inequality. Since the wealthy have much higher savings than those at the lower and middle levels of the economic ladder, who have little left to save after they consume, the pump has usually worked as follows: the financial sector has used the savings of the well-off to lend to the less affluent, allowing them to raise their consumption and investment levels. The less affluent were able to repay their debts, as long as the economy grew at a sufficiently high rate AND they received an important part of the extra income generated through this growth. However, the increased skewedness of income distribution in recent years has undermined the capacity of borrowers to pay back loans, and is undermining the functioning of the entire system, with less extra output generated by each unit of extra credit. Indeed, a central aspect that recent analysis has identified is that for all the hype, the actual growth achieved in the credit bubble years was not all that exuberant, with respect to the credit needed to finance it.

The standard counterargument is about placing the emphasis on expanding the pie, and worrying about distributing it later. However, there are three key problems here:

1. The theoretical provision for lump-sum transfers needed to guarantee Pareto optimality is not actually pursued, and is taken for granted;

2. Interpersonal comparisons of utility are excluded from these standard expand-the-pie models; however, envy and altruism unfortunately do exist (allowing them into the models may well lead to the emergence of public goods everywhere);
3. Even setting aside envy and altruism, the fact that the rich minority can push prices up for key limited supply goods (e.g. housing), pricing the poor and the middle class out of key market is an important, often bypassed, effect.

"Social initiatives, imbued by the 1930s' New Deal approaches, and leading up to the 1960s' Great Society programmes, are being or have been cancelled, and a return to 1920s or even 19th century style capitalism is lurking as a tendency."

Inequality is expectedly associated with a sense of failing representation by constituencies—52% of Europeans felt their voice was not heard in 2004, has gone up to 66% since then. This sense is exacerbated by the fact that much of the spectacularly high income has accrued to finance professionals in recent decades, and that finance, and practices adopted by its professionals, have provoked the crisis, and have been rescued by cash-strapped tax-payers (Op. cit. pp. 43-45). The implicit insurance against financial bets turning sour provided by the taxpayer makes the finance business a utility-like 'protected' business in need of regulation on the upside, as well as the downside.

Social initiatives, imbued by the 1930s' New Deal approaches, and leading up to the 1960s' Great Society programmes, are being or have been cancelled, and a return to 1920s or even 19th century style capitalism is lurking as a tendency (or at least as an asymptotic goal). Its keys are capital mobility enhancement, championed since the 70s, which has led to socially-downward-spiralling competition to attract mobile capital, and a 'pre-requisite' reduction in labour rights, also accelerated by the entry of new players, such as China, India, etc. in the arena of economic competition.

5. Asymmetric Economic Shocks and the Eurozone Crisis

As mentioned above, the architecture of the euro has been the key accelerator of the crisis in Europe, and the reason why it has acquired this particularly virulent debt-crisis form in the eurozone. These architectural vulnerabilities have to do with the way asymmetric economic shocks, in the context of uncertainty, can be dealt with in a monetary union. Unless these weaknesses are redressed, similar crises may very well plague the eurozone again in the future, potentially due to trade-related developments, and not only financial ones. It is worth delving deeper into them.

A shock is symmetric if it has a similar impact in all countries in the area in question (the EU in this case), and asymmetric if the impact differs substantially among countries. Shocks may be common to all countries in the community or country-specific. Country-specific shocks are obviously asymmetric and may be due to policy shocks, resource shocks or changes in the behaviour of economic agents. Even common shocks, however, may be asymmetric because countries react differently to a common shock due to differences in initial conditions, economic structures, policy preferences and economic agents' behaviour.

> *"The lingering undertow of the debt crisis, in which many still feel caught up, and its handling are not only producing a diminution of the middle class, they are also showcasing internal contradictions in both theoretical as well as policy terms, regarding the social aspects of the crisis and the economic policies and models behind them."*

The European Monetary Union and the recent tension faced by the eurozone provide an instructive context and the impetus for this analysis by making the theoretical models more relevant in two ways: a) The minimization of impediments to trade within the EU should move states toward increasing specialization on the basis of comparative advantage, thereby making them more vulnerable to random shocks and fluctuations; in other words, integration by reducing the plausibility of diversified production makes the problem of uncertainty more acute; b) At the same time, however, abolition of all capital controls and eventual monetary integration will assure free capital flows both in the direction of initial investment, as well as in the direction of interest repatriation, and will minimize the exchange risk usually associated with purchasing foreign currency denominated assets, hence tackling two of the constraints of the solution suggested in the literature. That solution basically consists in replacing real production diversity with internationally diversified portfolios, emphasizing investment in assets negatively covariant to the activity in which the country has specialized.

We should stress that although our analysis examines diversification through the asset market as a defense against post-specialization uncertainty in a neoclassical framework, the arguments apply, albeit with modifications, to an intra-industry trade framework. Studies exploring intra-industry trade and trade under imperfect competition shed light on them. (Gilpin, 1987; Krugman, 1986; Frankel and Rose, 1997; Tilford, 2006; Boone and Johnson, 2010).

To see this let us examine the taxonomy of shocks. Symmetric and asymmetric shocks have been discussed above. The mechanism of diversification through the use of the asset market can be employed in the absence of specialization on the basis of comparative advantage, and our analysis applies in that case, too: instead of purchasing assets from a country specialized in a negatively covariant activity, diversifiers should purchase assets from a country characterized by 'negatively covariant' reactions to the same common shocks.

A central authority with taxing, redistributing powers is not a feature of the EU integration, not yet anyway. Therefore, countries will need to buy insurance against unfavourable shocks, since there is no mechanism guaranteeing that rising income in one member state will be taxed to ease hardship in another. The analysis of this process however, its possibilities and pitfalls, escape the confines of this brief essay.

"Austerity policies may paradoxically end up reinforcing precisely those patterns they purportedly aim to overcome."

6. Concluding Comments

The lingering undertow of the debt crisis, in which many still feel caught up, and its handling are not only producing a diminution of the middle class, they are also showcasing internal contradictions in both theoretical as well as policy terms, regarding the social aspects of the crisis and the economic policies and models behind them. Moreover, much of the most interesting analysis addresses impacts, but rarely delves into the deeper social and economic incongruences at work in exacerbating both the crisis and the impact of austerity measures.

These incongruences end up frustrating the adjustment process by damaging the adjusting economy in profound ways, making it more difficult for it to recover (for instance, by losing key human capital to migration). There are 'deep' asymmetries between societies in crisis countries, and the target social model implicit in the austerity strategies adopted. They underpin a key contradiction: the austerity policies may paradoxically end up reinforcing precisely those patterns they purportedly aim to overcome.

Moreover, in the current and ongoing debt crisis in Europe, there are different levels of analysis and policy approach that are rarely examined together; generally speaking, there is a global level, a European one, and a national one. The European Union level involves the architectural weaknesses of the European Monetary Union, and its capacity to react to asymmetric shocks in the context of uncertainty. These weaknesses and interactions across levels of analysis must be addressed as other countries are facing tensions, and not just Greece, which has through blood, sweat and tears survived not just the crisis, but also the overshooting in terms of misestimated painful costs of adjustment, accompanying the various adjustment programmes imposed on the country in the last decade. Greece has joined other adjustment programme survivors (Portugal, Spain, Cyprus, etc.), and is gearing to face similar sets of problems (e.g. loss of human capital, precarious, often part-time, low-income new employment, etc.). In many ways, the more vexing problems in the not-too-distant future involve other larger countries, where very painful adjustment may be ahead, and where political tensions may be expectedly larger, both in international terms, as well as in the sense of the rise of social and regional pockets of discontent, with strong electoral consequences. Even though Greece has toughed it out in an enormously painful fashion, the issue still remains, facing countries large and small: it is not enough for each one of them to eliminate inefficiencies and tighten operations; the entire ship on which all European countries find themselves (and some would argue the western economies as a whole) must change its course, in order for any painful adjustment to bring about sustainable fruits, and for the common ship to make it to safe haven.

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