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Financialization, Trade, and Investment Agreements: Through the Looking Glass or Through the Realities of Income Distribution and Government Policy?

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Abstract

This paper assesses the effects of trade and investment agreements on income distribution and government policy. The critical process underpinning these effects is the rise of 'financialization'. Global patterns of greater financialization and of worsening functional income distribution as well as tighter fiscal stances are identified in the data. Tests are conducted by combining financial statistics with databases of bilateral investment agreements and free trade agreements, as well as data generated by the UN Global Policy Model that encompasses several fiscal policy instruments. The empirical validation of these relationships brings to the fore the policy-oriented debate about the purported benefits of modern-era 'comprehensive' trade and investment agreements such as TTIP, TTP and CETA. The authors corroborate the findings of their respective earlier studies of these agreements and reiterate their call for caution. To preserve policy space and to avert increases of inequality, policy-makers should resist pressures to get their economies locked in such agreements and should look instead for sustainable forms of international policy coordination.

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1. INTRODUCTION

The literature that describes the process of financialization 'through the looking-glass' is vast and ubiquitous.[4] These tales mention difficult choices, challenges, trade-offs, winners and losers. But the promise of being crowned with bonanza at the end of the journey is as tempting as the prospect of being excluded from the game is scary. Eventually, one country after the other join the race of financial liberalization, displacing national rules with trade and investment agreements, de facto or de jure.

But the tales that present full financial liberalization as inevitable and their enabling agreements as the road to success are misleading. Back to reality it is becoming increasingly difficult to ignore that financialization is a process that deepens income inequalities and inhibits governments from using policy instruments to promote full employment, protect welfare and pursue economic development. Yet, apologists of globalization intend to show, with considerable ingenuity that the oft-found evidence of inequality is an accident of technological progress or even the result of excessive government intervention. Such intents have been particularly incisive in the context of promoting bilateral and regional trade and investment agreements.

Over the recent past, considerable attention was given to three mega trade and investment agreements that could effectively alter the global dynamics of trade and financial commitments. These are the Comprehensive Economic and Trade Agreement (CETA), the Trans-Pacific Partnership Agreement (TTPA)[5], and the Transatlantic Trade and Investment Partnership (TTIP). Their new sets of rules have the potential to override not only national legislation but also many of the understandings and warranties embedded in multilateral agreements. To some observers and most of their sponsors, these are proclaimed as blueprints for WTO negotiations in the foreseeable future.

The numerous studies highlighting the purported benefits of these agreements cover a wide range of disciplines, from international law and politics to economics. Perhaps it is in the field of economics that justifications are particularly fantastical. These are based on economic models that assume full employment as well as perfectly competitive markets, where all players are the same and there are no oligopolies or 'winner-takes-most' transnational corporations; all factors can move freely across the partnership area; all un-used resources from labour to installed capacity to financial savings are automatically reutilized and re-invested in more efficient ventures; all financial gains resulting (presumably) from the elimination of tariffs and of health and environment norms, as well as from financial deregulation are transferred to consumers; all factors are paid fairly according to their marginal contribution to production and so on.

[4] In Lewis Carol's novel "Through the Looking-Glass", Alice steps through a mirror that brings her into a fantastic world, as opposed to the reality that she leaves behind, in which she is promised to be crowned as a queen if she manages successfully to reach the end of the chessboard.

[5] Its newer version, after USA President pulled out, is named Comprehensive and Progressive Agreement for Trans-Pacific Partnership.

More strikingly still, the battery of economic models used is derived from 'trade-only' analyses while such agreements are 'comprehensive' by design, involving issues like public procurement and government services, food, health and environmental standards, labour regulations, financial flows, investors protections, etc. Given that the 'comprehensiveness' of the agreements is essential in their conception (negotiators and observers correctly reckon that with trade tariffs at a historical low it is unreasonable to expect meaningful gains from further trade liberalization), trade-only models would naturally have little to no purpose in the analysis. Yet, these models simply extrapolate tariff-related adjustments to the mentioned areas, equating all non-trade changes under the agreements to cost-reducing, efficiency-improvement innovations that trigger more activity and welfare.

The use of these models has been criticized in several occasions by pointing to their methodological failings.[6] Among these critiques, some studies have proposed alternative estimations generated with the UN Global Policy Model,[7] which is a more comprehensive empirical framework that combines trade, finance, labour, macroeconomic dynamics, income distribution, fiscal and monetary policy, environmental impacts, etc.[8] This research work showed, on each of the specific conditions of the regional agreements, the main mechanisms in place which through trade, finance and constraints to domestic policy space would yield outcomes that are plausibly detrimental to employment, growth prospects, welfare and economic development.

The results of these alternative studies were condensed into explanations of model dynamics and outcomes. For example, from the GPM-based studies it became clear that the greater financial liberalization and integration which these agreements promote would exacerbate income inequalities. The mechanisms at work are known and were explained in the mentioned papers in terms of pressures on asset appreciations; greater activity in real estate and stock markets than in production and employment generation; financial innovation proceeding at a faster pace than regulation; instability and even financial crisis that generally discourage investment and employment creation, hit the poor, etc. But the question remains: is there sufficient empirically verifiable evidence that financial liberalization lead to worsening income distribution? Similarly, the GPM-based simulations proposed that (financial) investment agreements exert constraints on government behaviour, resulting from combinations of tax advantages that foreign investors extract from local policy-makers with restraints on government spending in goods and social services and rises in (regressive) value added tax rates that governments have to resort to in order to achieve fiscal surpluses and attract foreign inflows. Again, the question remains: is there sufficient evidence to justify these effects?

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[6] See, for example De Ville and Siles-Brugge (2016), Raza et al (2014), Rosnik (2013), and Scott (2013).

[7] See Cripps and Izurieta (2014) and related studies at http://debt-and-finance.unctad.org/Pages/GPM.aspx

[8] Capaldo (2015), Capaldo and Izurieta (2018), Kohler and Storm (2017). See also a series of related briefs and commentaries http://www.ase.tufts.edu/gdae/policy_research/globalization.html.

While the UN-GPM includes into its dynamics and econometric estimation many such effects, these are not usually captured in conventional models, especially those driven by assumptions of full employment and perfectly competitive markets. Besides, as noted above, many of the conventional models that trumpet the benefits of the comprehensive trade agreements are 'trade-only' and do not include fiscal and monetary policy, financial sectors, asset prices, etc. Unsurprisingly, from the perspective of such narrow models it has been lightly argued that the GPM-based model scenarios are simply derived from arbitrary assumptions imposed on the results. Hence, it is important to show more explicitly how such interactions between on the one hand, greater financial liberalization and trade integration and, on the other hand, worsening income distribution and constraints on fiscal policy come about. This is the purpose of this paper.

The next section presents global patterns that suggest possible co-movements of financialization, investment agreements, income distribution and fiscal policy. In discussing the trends that emerge, theoretical insights are provided to highlight the main mechanisms that link financial dynamics with the real economy, affecting distribution and government policy. The section that follows shows the treatment of the empirical findings and the last section concludes, calling for more realism in the assessment of trade and financial liberalization agreements.

2. EXPLAINING GLOBAL PATTERNS

The main propositions of this paper hinge on the concept of financialization, as a process that is assumed to connect changes in the global structure of finance and trade, with changes in income distribution and government policy. Financialization can be understood as the rise of financial sector activity relative to real economic activity, together with the increasing influence and power of financial institutions over economic policy formulation, both of which occurring along the process of globalization of the past decades. Precise definitions in measurable empirical terms tend to vary.[9] These cover a wide range of estimates, from stock market capitalization to debt-to-income ratios, aggregate money supply, assets of the financial system, degree of monopoly or bank concentration, external asset positions or capital flows relative to GDP, etc.

[9] See, for example Epstein (2005), Dodig et al (2016), Hein (2012), Michell and Toporowski (2013), Stockhammer (2013), Storm (2018), Vasudevan (2016).

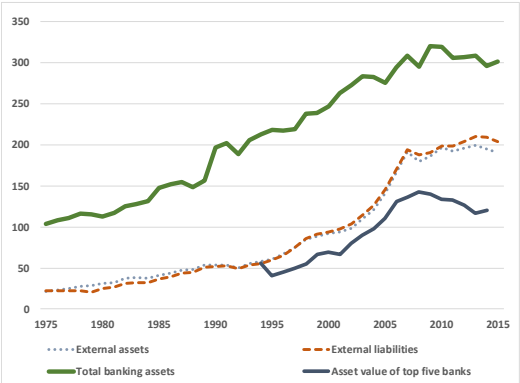
Financialization trends

For the purpose of this study, global patterns of financialization are captured by external assets and liabilities and the size and concentration of domestic banks. Figure 1 presents these indicators at aggregate levels for developed and developing countries.[10] Both groups show rising trends of financial positions relative to income (GDP aggregated for each group).

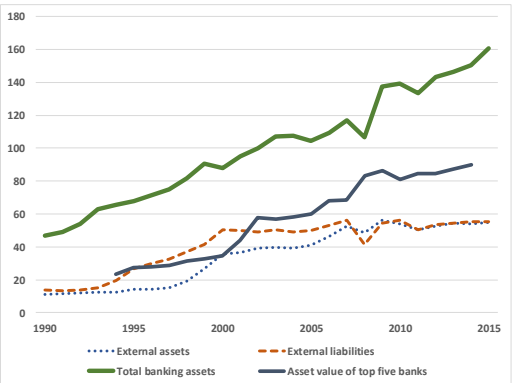
Figure 1: External financial positions, bank assets and concentration

(per cent of GDP)

(a) developed countries (1975 - 2015)



(b) developing countries (1990 - 2015)



Sources: IMF Balance of Payment Statistics for external assets and liabilities
IMF International Financial Statistics for aggregate assets of the banking system
Bankscope and Worldscope for assets of individual banks
Authors' calculations

Gross external assets and liabilities of developed economies as a whole have risen from below 50 per cent of GDP in the early 1980s, and an average of 65 per cent of GDP in the 1990s, to about 200 per cent of GDP by 2015.[11] The relative size of external positions for developing countries is smaller, but even in this case the proportions to GDP doubled between the 1990s and 2015. It should also be acknowledged that developing countries remain far more vulnerable than developed countries on the external account, even if at lower proportions of GDP because of at least two factors. First, their domestic currencies are not generally recognized abroad as means for settling accounts and, second, their exchange rates with respect to major currencies tend to fluctuate significantly for reasons beyond their control.

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[10] The samples initially included the major economies of each group (about 25 developed economies and 19 developing economies), but in some cases extrapolation and gap filling was required. Complete source data was obtained for eight economies of each group. See UNCTAD (2017a), chapter 5 for individual country figures. The aggregation to determine asset concentration is done in two steps. First, the total assets of the five largest banks of each country are recorded. Second, these totals are aggregated for each group. Hence, 'top five banks' in this case comprises of 40 banks for each group of 8 economies. For developing economies these figures are calculated up to 2014 due to data availability.

[11] External assets and liabilities include gross positions of financial derivatives which, in fact, represent various loops among them. While for some purposes these portfolio accounts can be presented in net terms (gross assets minus gross liabilities), they are not netted out here. Indeed, the rising size of derivate volume denotes greater systemic vulnerability, impacting not only formal banks but also insurers and hedge-funds with unpredictable consequences across borders. This became apparent when the potential collapse of the American International Group (AIG) in September 2008 threatened the stability of large financial institutions across the developed world because of the incalculable chain of insurance contracts on endless layers of derivatives.

Total assets of the domestic banking systems in both developed and developing groups have also been rising at a considerable pace from the early 1990s to recent years (with some deceleration for developed countries after the financial crisis, as the banking system as a whole experienced loses of asset values and write-offs, only partially covered by central bank infusions of liquidity). Hence, bank assets of developed countries rose from about 150 per cent of GDP in the early 1990s to about 300 per cent of GDP in 2015. For developing countries these figures are 50 and 160 per cent, respectively.

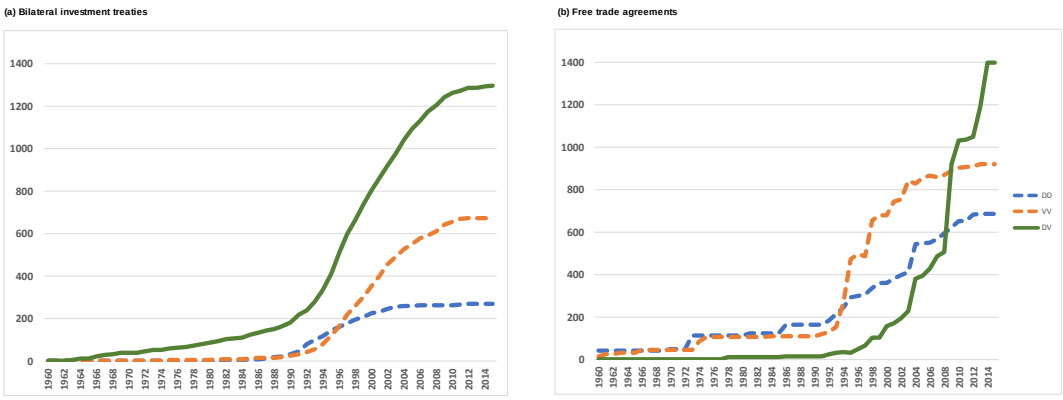
Bank concentration patterns are telling. The figure for 'assets of the top five banks' is constructed as a weighted average among all countries in each group. Relative to GDP the sizes of balance sheets are disproportionally large, but what is more striking is the sharp rise over such a short period of time. For developing countries in the sample, the average size of the balance sheets of the major banks rose from 23 per cent of GDP in 1994 to nearly 90 per cent of GDP in the most recent period. Concentration in developed countries also rose notably, with the average figure for top five banks rising from 56 per cent of GDP in 1994 to 140 per cent of GDP in 2007 (declining slightly to 120 per cent after the crisis).

Together, these trends denote an increasing size of financial flows and stocks with respect to GDP during the last 25 years and, what is more, an alarming rise of the size of the larger banks – the so called 'too big to fail' actors are ever more present on the global stage.

Proliferation of agreements on trade and finance

If financialization patterns are assumed to be supported by trade and investment agreements, we should be observing a proliferation of the latter. As it is known, most agreements of this kind either include explicit text referring to financial opening, deregulation and investment warranties, or such behaviour is expected by the signatories in exchange for market access and FDI commitments.

Figure 2: Trade and investment agreements: bilateral patterns and diffusion (1960 - 2015)
Number of country pairs per treaty at each point in time



Legend: DD: deeloped with developed economies; VV: developing with developing economies; DV: developed with developing economies
Source FTA data: De Souza (2015); BIT data: UNCTAD (2017b)

Figure 2 suggests that the observed patterns of financialization have moved in tandem with the diffusion of bilateral investment treaties (BITs) and free trade agreements (FTAs). From early and mid-1990s, both kinds of agreements have proliferated at striking rates, following typical 'logistic-curve' patterns: fast rises initially, followed by smooth accelerations, eventually reaching a ceiling once most countries and areas of agreement are covered.

The rapid rise of BITs hints to a direct connection with potential rises of capital flows between countries, which in turn affect volume of operations of domestic banks. Apart from the explicit intent of promoting FDI and portfolio investment, a glance at the text of many of such BITs shows that they require, or endorse 'hands-off' capital account management, warranties for investment protection ('greenfield' investment as well as short- and long-term inflows) and sufficient legal assurances for opening subsidiaries of financial institutions (Choudhary and Kulkarni, 2012).

FTAs, meanwhile, should not be interpreted as 'trade-only', unrelated to finance. Connections with the process of financialization described above are many. First, trade is usually conducted on short-term (export) credit, which requires increasing involvement of financial intermediaries across borders. Second, trade agreements have become more 'comprehensive' over time, involving intellectual property rights (TRIPs), 'services trade' (such as finance and insurance) and more. Third, to the extent that trade agreements presuppose the ability of corporations to transfer parts and facilitate production processes across borders, they usually include clauses on FDI. As the distinction between FDI and other portfolio flows is distorted by the proliferation of mergers and acquisitions or by the ability of foreign companies to borrow and export capital, it is not surprising that FTAs promote greater financial operations (Kregel, 2014). Finally, 'trade-relatedness' (referring to a variety of non-trade activities that are induced by international trade) has become a constant feature of multilateral trade negotiations since the 'Uruguay Round' of the GATT in 1994.[12] As many trade negotiators in Geneva (where the WTO is headquartered) would readily confirm, the striking rise of FTAs between developing and developed countries from 1995 onwards reflects the difficult choices of policy-makers of the former group, who accepted or promoted trade agreements including 'trade-related' and investment chapters on the aspiration that the WTO negotiating round that followed, the 'Development Round' (also called 'Doha Round') would eventually incorporate safeguards for developing countries. To this date, the Development Round was not yet concluded (and many believe it will no-longer be signed on its initial spirit) and yet the FTAs are well in place.

[12] The most comprehensive 'trade related' WTO agreement, referring specifically to Intellectual Property Rights (TRIPs), was signed in early 1995; meanwhile, the Agreement on Trade Related Investment Measures (TRIMs) was adopted as a compromise text in December 1991, and was retained as such in the Marrakesh Agreement that concluded the Uruguay Round (Correa and Jumar, 2003)

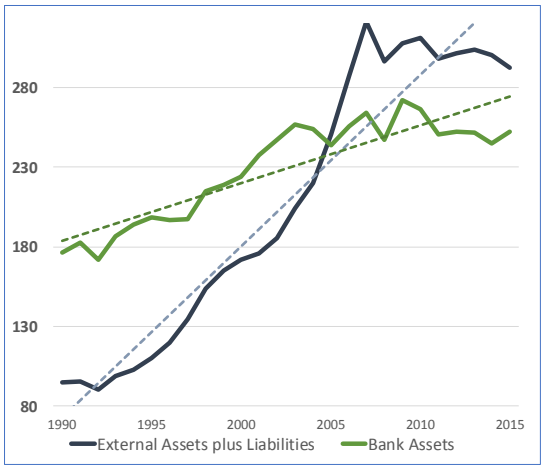
In sum, the link between diffusion of trade and investment agreements, on the one hand, and financialization on the other hand seems intrinsic to the globalization process, and it has been extensively discussed in such terms.[13]

Deterioration of income distribution and fiscal tightening

At the global level, the correspondence between the patterns of financialization, worsening income distribution and tightening fiscal budgets seems straightforward. Figure 3(a) consolidates the 'financialization' variables of Figure 1 into quasi-global aggregates to make inferences on global trends. The figure of total external assets plus liabilities relative to the GDP of the group of countries involved can be taken to represent patterns of vulnerability of most economies to external creditors and debtors.[14] Likewise, the consolidation of assets of the banking system shows the growth of domestic asset balance sheets relative to GDP for most world countries. Their rising trends are highlighted by the dashed lines. To stress the mentioned correspondence, two global indicators are presented in Figure 3(b).

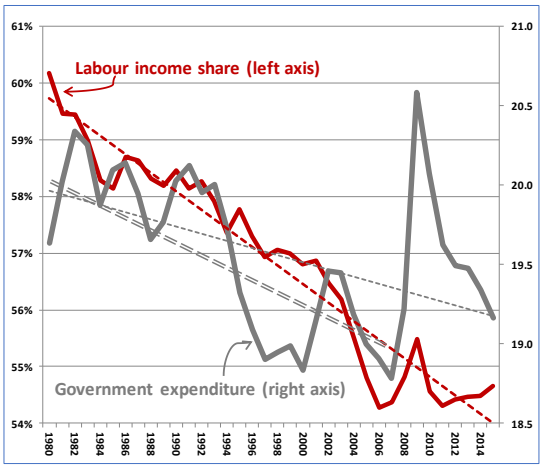
Figure 3: Global trends

(a) Financialization (per cent of GDP)



Sources: See Figure 1 (authors' calculations)

(b) Functional income distribution and government expenditure (per cent of WGP)



Sources: UN Statistical Division National Accounts
Complemented with national sources such as Social Accounting Matrices
Global aggregation generated with the UN Global Policy Model

[13] See for example Akyüz (2015, 2017), UNCTAD (2011), and comprehensive volumes such as, Della Giusta et al (2006) and Baker et al (2000).

[14] By aggregation of numerator and denominator the figure is both a 'quasi-global' average as well as an indicator for the group as a whole. The selected economies in the sample represent about 85 per cent of global GDP, hence the term 'quasi-global'.

Income distribution is captured by the global aggregation of labour income relative to gross world product (WGP), usually denoted as 'global wage share'.[15] The trend is also shown, hinting to a negative correlation with the rising financialization patterns exhibited in figure 3(a). Plotted over the right-axis, the same figure 3(b) captures the also declining pattern of government expenditure in goods and services, calculated globally and measured as per cent of WGP. Two trend lines are shown. The longer dotted line represents the trend across the entire period of observation. Despite the fact that most economies had to resort to unprecedented fiscal stimulus in the immediate post-crisis of 2008-2009, the trend line shows a declining slope. Yet, in so far as it can be argued that the true, ex-ante policy stance is better represented by a trend that runs up to 2008 only, it seems worth considering as well the shorter, 'double-dot' trend line, which has a steeper negative slope.

The existence of a link between rising financialization and worsening income distribution at a global level is not a new finding and has been noted in several studies. Galbraith's (2012) comprehensive investigation of inequality in relation to macro-financial instability is worth-mentioning. He refers to the period after the 1980s as a 'super-bubble in world financial markets', following George Soros, the investor. This is explained 'as a time when economic growth became dependent on unstable financial relations', which comes close to the notion of 'financialization' made above. Galbraith then summarizes his investigation on global inequality by remarking 'this work demonstrates that the super-bubble was also a super-crisis for the world's poorest -a prolonged period of worsening pay gaps in most countries around the world. […] Indeed, the evidence strongly suggests that global finance is a *principal* source of changing global patterns of pay inequality' (p.73). Similarly, Stiglitz (2013) narrows down the global factors of inequality to 'financial liberalization' and 'trade globalization'. Putting unequivocal emphasis on how 'globalization has been managed' for the interests of the 'people at the top', he concludes that 'the result is that in many countries, including the United States, globalization is almost surely contributing significantly to our growing inequality' (p. 80).[16]

[15] The figure is constructed with the UN Global Policy Model on basis of national accounts data; it represents historical, not simulated data. It is constructed by consolidating 'distribution of value added' components at national level for all countries reporting to the UN Statistical Division. In some cases, gap-filling, extrapolation and adjustments are made on basis of existing Social Accounting Matrices and other sources.

[16] Stiglitz stresses a regulatory upper-hand: making reference to his earlier book Globalization and its Discontents, he notes: 'When we wonder how it is that the financiers get so much wealth, part of the answer is simple: they helped write a set of rules that allows them to do well, even in the crises that they help create' (2013: 76).

The observed inverse relations between financialization and government expenditure has also been noticed in several studies, especially throughout the experiences of fiscal austerity which most world countries accepted in the post-crisis years from 2010 onwards.[17] In these instances, like in the 'debt-crisis resolution' programmes imposed in numerous developing countries since the mid-1980s, fiscal tightening becomes the pre-condition for foreign investment and capital inflows to counter speculative attacks and capital flights[18]. In addition, the power of finance, and more generally of large firms (domestic and international) operating under globalization is commonly exercised to demand lower corporate taxation on the threat of going somewhere else.[19] Down this path, governments must shift the tax burden on consumers, or cut infrastructure and other expenses.

Patnaik (2006) provides a macroeconomic framework to highlight the various ways in which capital flows influence government action. With free mobility of capital, the determination of the interest rate, together with the fluctuations of the exchange rate remain at the whim of foreign investors in perverse ways: to maintain inflows, or to attract creditors in difficult times, interest rates must often be kept higher than it is optimal for local investment and needed public expenditure. The implied deflationary effect on domestic private and public sectors will have further negative effects on government budgets. The growth of net external demand cannot be taken for granted as the exchange rate appreciates. Foreign investors' confidence can only be maintained by higher interest rates and lower government spending (tight budgets). The prospects of keeping interest rates low to encourage domestic activity capital formation are narrower as financialization gathers pace. Meanwhile, even if an economic boom allows a favourable confluence of current account surplus, low exchange rate and low interest rates, the rise of net external asset positions will lead to exchange appreciation pressures following from further attraction of financial inflows (as foreign investors in a free-capital flows environment tend to act pro-cyclically). Local policy-makers will be accumulating reserves at a loss and would be moreover increasing the financial vulnerability of the economy to a sudden change of perceptions. Crisis and significant slowdowns of economic activity carry huge costs to public sector balances. All in all, an economy exposed to increased influence of financial flows will find itself increasingly unable to manage public budgets and the policy stance will tend to be deflationary.

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[17] See, for example Ghosh (2013), Oritz et al (2015), Storm and Naastepad (2016), UNCTAD (2017a), Varoufakis (2016).

[18] The literature arguing for fiscal discipline as a cure, and prevention for balance of payments crisis and to regain the confidence of foreign investors is vast and well-know. It has evolved from earlier frameworks like Polak's (1957), core to IMF stabilization programmes, to more recent debt-crisis models like in Kaminsky and Reinhart (1999), or Reinhart and Rogoff (2010). Despite the numerous critiques of these arguments, this is the dominant view to which policy-makers abide.

[19] This is well-known and has been highlighted by many authors. See for example Stiglitz (2013), Hudson (2105)

As noted by Chandrasekhar (2018), financial capital tends to exert pressure on governments to refrain from deficit spending and resort instead to privatization of public assets. This is not only because of the aversion to state asset ownership in a private enterprise world, but also because of the intrinsic relation with the expansion of finance: along the financialization process as described above, 'the value of financial wealth races ahead of real wealth in the system, [hence] new avenues for converting financial wealth into real wealth must be found' (p. 112). Furthermore, the author observes, privatization of public assets as a mechanism of deficit financing helps to avert that the alternative, a flooding of government securities into the market threatens the 'near-zero-risk hedging option', of financial-wealth holders. In other words, government bonds, being liabilities for the public sector and assets for the private sector, function well as a safe-investment option of 'finance capital' owners provided that such investors judge that the volume of these portfolio is not high enough to threaten their risk-free character. In sum, finance capital exercise a double pressure on government policy: on the size of the deficit and on the mechanisms available to finance it.

Before concluding this section, it seems appropriate to recall the legacy of economic thinkers of the XX century who have articulated the relation between the expansion of finance with inequality and weakening states.

One central preoccupation of Keynes ([1936], 1997) was the tendency to under-consumption that is inherent in the capitalist system. Discounting the role of the state, the main figure of the unfettered capitalist system is the investor, driven by the profit motive. Distribution in favour of profits should encourage economic activity and employment generation, but the inverse effect of distribution against labour weakens consumption. Hence investors would be increasingly diverting resources towards financial, speculative activities. Keynes differentiated speculative activities from the 'enterprise activity' in so far as the former focuses on forecasting the 'psychology of the markets', rather than the expected yield of an asset based on its fundamentals. Uncertainty for Keynes was a fundamental characteristic of the system and this brought him to assert that the 'capital development of a country is becoming a by-product of the activities of a casino' (1997:159)[20]. In short, capitalist economies left to market forces will exhibit both a growth of financial, speculative activities and inequality. The remedy proposed by Keynes consisted of an effective role of the state in ensuring investment and income distribution through employment and provision of services.

[20] Keynes enjoyed a unique position to assess the reliability of the markets for investment and credit, as he was not only an academic but an active investor in his capacity of Bursar of King's College, Cambridge, while writing the General Theory. Interestingly, another investor, George Soros, making a successful carrier through to the vagaries of financial markets, reckoned that financial markets are inherently far from stable equilibrium, bound to fallibility and reflexivity (see Soros, 2008).

Several authors in this tradition expanded on the theme of income distribution and full employment mediated by the role of the state (Kalecki, 1944; Pasinetti, 1974; Kaldor, 1956).[21] Minsky ([1963] 1982, [1975] 2008, 1986), following Keynes and these authors deepened into the analysis of financial instability and the underlying distributional strife present in many of the financial crises experienced over this period of intense globalization. He observed that in the configuration of the world economy after World War II the dependency of profits on physical investment has been greatly reduced. In his review of the post-war years in the US, Minsky stressed that 'the investment boom was made possible by an increase in speculation with respect to liability structures by both financial and non-financial firms'. (1975, p. 159). This in part reflects the tendency towards financial innovation. It was evident that financial innovation was expanding at a more rapid pace than countervailing regulation, leaving therefore its developments increasingly at the mercy of market adjustments.[22] The steady rise of profits would will worsen distribution but for wealth-holders will confirm a sense of sure prosperity. While the apparent tranquillity accelerates the pace of financial innovations, the system becomes increasingly vulnerable: stability feeds instability.

Additional insights are obtained from the inspection of the role of governments and central banks, critical elements in Minsky's framework. In a prescriptive sense, the author sees a positive role for governments, particularly regarding the combination of government deficit-financing, and the central bank role of lender of last resort. But his empirical observations of the US economy suggest that policy was misdirected: the 'policy's proximate aim was to achieve high, and rapidly increasing profits […] by tax and subsidy arrangements'. The author further concludes: 'The economy is now a controlled, rather than a laissez-faire economy; however, the trust of the controls is not in the direction envisaged by Keynes. Investment has not been socialized. Instead, measures designed to induce private investment, quite independently of the social utility of investment, have permeated the tax and subsidy system' (p. 162).

Minsky's observation that the inherently unstable dynamics of financial innovation and investment have been supported by government policies to serve profit-making institutions is not unique of the United States. Helleiner (1994), by providing a synthetic historical review of the globalization of financial markets from Bretton Woods to the early 1990s, highlights similar mechanisms. In his view, states of advanced industrial countries played their role by (i) 'granting freedom to market operators', and (ii) 'choosing not to implement more effective controls in capital movements' (p.21). The

[21] Authors in this tradition also devoted considerable attention to the implications of laissez-faire capitalism for international financial instability. See for example edited volumes such as Kaldor (1964), Eatwell and Taylor (2002), Kregel and Kattel (2014).

[22] In Minsky's words, one of the factors for the excessively rapid pace of financial inventions is the fact that 'successful innovators are rewarded by fortunes and flattered by imitators' (1986 p. 220). But other factors have to do with the different set of views and motives of financial regulators and financial investors. Behind the former lie some theory about how markets behave and what is a 'normal' reward, but investors innovate in order to circumvent regulations and expand their profit opportunities, even assuming greater risks and expecting to be bailed-out if they fail.

author stresses that there was a dramatic liberalization trend in those terms from the early and mid-1980s onwards, and cites the various specific measures adopted in a wide range of advanced economies, especially those geared to support the three major financial centres: New York, London and Tokyo.

To conclude, the global patterns projected above suggest the existence of correlations between, on the one hand trade and financial agreements underpinning a strong financialization of the global economy with, on the other hand, worsening income distribution and constraining public sector policy. These are not accidental. As noted by Galbraith (2012: 73), 'the proper conceptual domain for the study of global inequality is *macroeconomics*, and macroeconomic forces common to the entire global economy can be identified in the data'.

3. EMPIRICAL FINDINGS IN GREATER DETAIL

The overview of global patterns and theoretical insights can be corroborated with a more granular empirical investigation. The issues at stake involve the existence of correlations in the data, denoting macroeconomic and global mechanisms, and can be treated sequentially[23]. In a first instance it will be necessary to show that the diffusion of trade and investment agreements is consistent with the rise of financialization. Granted that, in a second instance it will be necessary to show the effects of financialization on the variables that most clearly denote inequality and fiscal policy constraints.

Investment treaties and trade agreements: do they contribute to greater financialization?

In broad terms, the relation to be tested could be expressed as follows:

$$\boldsymbol{Eq.\ 1\ Financialization = F\{\ BITs, FTAs, 'control\ variables', \epsilon\ \}}$$

Among the variables proposed in the previous section to denote financialization, the ones with greater coverage for number of countries and length of historical series are external assets and liabilities. More specifically, this exercise is carried out using the total of assets and liabilities, expressed as a ratio to GDP.[24] Panels are formed with each of the 160 countries in the sample that have signed investment or trade agreements and further dispose of data for other relevant variables.

[23] To be sure, global and macroeconomic links and possible causalities discussed in this section are interrelated with each other in quasi-endogenous manners, with feedbacks and loops of further interactions and therefore cannot be fully interpreted with partial analyses.

[24] Most of macroeconomic variables in this exercise are normalized by GDP to take away country effects (heteroskedasticity in the data). Further, in this case as well as other long term series with significant trends, logarithmic expressions are used.

The main factor that is assumed to trigger greater financialization is the existence of either investment or trade agreements. Various versions have been considered, but only three are presented here explicitly, depending on how to distinguish agreements across institutional breakdowns or geographies:

(i) In this version, aggregate 'counts' are generated from entry into force of bilateral investment or free-trade agreements one of the G7 countries. Investment and trade agreements are counted separately. The option of agreements *not* involving G7 countries has been discarded because it introduced too much 'noise' in the econometric relations and little benefit in terms of explanatory power.[25]

(ii) In this second version, the 'count' of each type of agreement of version (i) is disaggregated depending on whether the agreements took place before or after significant institutional changes took place. The points in time to indicate institutional changes here are 1994 for trade agreements and 1989 for investment agreements. The year 1994 marks the signing of NAFTA, which is the first comprehensive 'trade' agreement involving the US that incorporates relevant investment clauses. It is also the year of the closure of the Uruguay Round which opened up 'trade-related' areas within trade agreements, such as trade in services (GATS), "trade-related investment measures" (TRIMs) and trade-related intellectual property rights (TRIPs).[26] Meanwhile, the year 1989 marks the moment in which the OECD started promoting the liberalization of short-term capital flows, led by the United Kingdom and Germany who argued that all members of this institution by then had sophisticated enough money markets to operate such a transition. This led other G7 economies that had not done so yet to follow. All nations that acceded to the OECD since 1989, regardless of their level of development, also liberalized their capital accounts fully to include short and long-term maturities.[27]

(iii) In this third version the 'count' is disaggregated depending on whether the agreements with the G7 involve developed countries (G7 countries among themselves or G7 with other developed countries), or with developing countries, or with transition economies.

As customarily in this kind of exercises, control variables are taken into account. These variables are necessary to the extent that they can be said to help isolating the effects of the treaties on external assets and liabilities, but as known they could introduce additional multicollinear effects (economic time series show high degrees of correlation with each other). To partially avert problems of multicollinearity, such variables are introduced with one or two lags. The control variables in this exercise include:

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[25] It is intuitively easy to see that for most developing countries the largest share of their external portfolio involves G7 countries. Exceptions like China representing significant portions of external portfolio positions are recent and do not justify expanding the 'count' of pairs for the entire sample. See Bodea and Ye (2017).

[26] See Correa et al (2003) and Gallagher et al (2013).

[27] See Gallagher (2010).

- The relative income per capita of a country with respect to the world average, which may imply different economic structure and responsiveness resulting from the how 'rich' or 'advanced' the economy is.
- The growth rate of GDP, implying that fast (slow) growth may be associated to low (high) levels of external assets and liabilities. This variable could thus partly net out the impact arising from the fact that (usually developed) countries with higher levels of external assets and liabilities also grow at a slower pace.
- 'Services', denoting the share of services in GDP. As a higher share of services in GDP is likely to be associated with a larger financial sector and probably also larger external assets and liabilities, including this variable will help better isolate the effect of the entry into force of bilateral investment agreements.
- The ratio of exports to GDP, which may influence the degree of financialization above and beyond the existence of treaties and the share of services in GDP. Good export performers, or improvements in export performance tend to be accompanied with larger external portfolio volumes (though caution is required regarding interpretation since there may be some feedbacks with trade agreements, even if it is not necessarily the case that free trade agreements lead to higher exports and in any case not immediately).
- Pre-crisis and post-crisis conditions. This variable is constructed by signalling events of financial crisis and taking 3 years before as a period of 'crisis build-up' and 3 years later as a period of 'crisis impact'. The logic of this is intuitive: most economies experience a financial crisis when there is an abnormal build-up of external liabilities and likewise, external portfolio activity tends to increase in the immediate period of recovery.

Table 1: BITs and FTAs with financialization - estimation results

Dependent variable =>	(i)	(ii)	(iii)
Regressands:	Financialization	Financialization	Financialization
L. GDP pc/GDP pc of the worl	0.028***	0.024***	0.023***
L. Export/GDP	1.001***	0.969***	0.974***
L. GDP growth	-0.410**	-0.425**	-0.446**
L. Services/GDP	1.678***	1.657***	1.553***
Dummy crisis build up	0.111***	0.109***	0.110***
Dummy crisis impact	0.225***	0.215***	0.226***
BIT_G7	0.212***		
RTA_G7	0.229***		
BIT_G7_pre1989		-0.518	
BIT_G7_post1989		0.198***	
RTA_G7_pre1994		-0.511**	
RTA_G7_post1994		0.240***	
BIT_G7_dev			0.088
BIT_G7_devn			0.235***
BIT_G7_tr			0.383***
RTA_G7_dev			0.791***
RTA_G7_devn			0.130**
RTA_G7_tr			0.220
Constant	-1.445***	-1.362***	-1.398***
Observations	5,748	5,748	5,748
R-squared	0.436	0.451	0.447
Number of countries	160	160	160
Country fixed effects	YES	YES	YES

Notes: 1. "L" denotes a one-period lagged variable.
2. All variables, including financialization, BIT and RTA 'counts' as defined in the text.
3. Estimated using Ordinary Least Square with country fixed effects and robust standard errors.
4. Estimation period: 1970 - 2015

*** Significant at 1% ** Significant at 5% * Significant at 10%

The detail results of the three versions of this equation (i. to iii.) are presented in Table 1.[28] The econometric tests confirm that the 'count' of investment or trade agreements leads to a deepening 'financialization' as measured by the size of external portfolio's relative to GDP. This is unequivocal whether the aggregates of treaties are considered (version i.) or whether a distinction is made depending on whether the partner to G7 countries involved in the agreement is a developed, developing or transition economy

[28] Several variations over these three versions were also tested. For example, different 'weights' were used to aggregate the 'count' of agreements: without weights, with GDP weights and with the size of the total bank assets of the G7 partner countries as weights. The cases shown in the Appendix use GDP weights. But all versions show the same direction and significance of results, with changes only on the impact coefficients.

(version iii.)[29]. Meanwhile, version (ii.) confirms the importance of considering institutional changes of global finance or trade as a 'structural break'. Indeed, bilateral investment treaties in force before 1989 do not have significant effect on the degree of financialization; meanwhile trade agreements before 1994 seem to have an inverse relation with financialization. This is an interesting finding and could well suggest that it is the 'comprehensive' nature of trade agreements, typical of the last 25 years, which trigger the increased dominance of financial capital, while earlier trade agreements may have a greater impact on GDP (the denominator of the 'financialization' variable in this exercise) than on external assets and liabilities.

Financialization: does it lead to increased inequality?

After having established that trade and investment agreements lead to greater financialization, the question that follows is whether increased financialization has an impact on inequality that could be traced in the data. Like before, the relation to be tested could be expressed in broad terms as follows:

$$\boldsymbol{Eq.\ 2\ Inequality = I\{\ financialization, 'control\ variables', \epsilon\ \}}$$

Inequality is measured on the basis of personal income distribution, in net terms, using data collected in the *Global Consumption and Income Project* database (GCIP; see Lahoti et al., 2014). This database provides as well several estimates for synthetic measures of inequality, of which this empirical exercise extracts two: the Gini coefficient and the Palma ratio. The Gini coefficient is well known; notionally, it measures how far a distribution is from an 'ideal' distribution in which all members of society receive the same income. The greater the Gini the higher inequality. The Palma ratio is calculated as the proportion of the top 10 per cent of the income distribution to the bottom 40 per cent. Thus, it looks at the tails of the distribution, which implies the notion that the 50 per cent of the middle experiences a more stable pattern than the perhaps more apparent fluctuations between the minority at the top and the majority at the bottom.[30] Like with the Gini coefficient, the higher the Palma ratio the greater the inequality.

Accordingly, two different versions of this equation are proposed:

(i) Income inequality is measured by the Gini coefficient, transformed into logarithms to preserve uniform time series properties with other variables

(ii) In this second case, income inequality is measured by the Palma ratio. Given the universally valid observation that the top income segment is also the "asset-wealthiest" (Davies et al., 2011; Piketty, 2014), and that in turn financial wealth

[29] There are two apparent exceptions. For transition economies, bilateral investment agreements have the unambiguous effect of increasing the degree of financialization, but trade agreements are not significant. For developed economies, the impact of BITs on financialization turned out not significant, possibly reflecting the greater weight of pre-1989 'counts'.

[30] See Palma (2011). The implication of a more stable middle has been confirmed by cross-country research over the past few decades (see Cobham et al., 2015).

tends to be greater under periods of greater financialization, there is sufficient merit to consider this measure as complementary to the previous one.

The same financialization measure used as dependent variable in equation 1 is used here: the ratio of total external assets and liabilities relative to GDP (logarithmic form).

Regarding control variables, the following set is proposed (after discarding a number of other alternatives to reach the most parsimonious expression):

- Like in equation 1, the (log of) relative income per capita of a country with respect to the world average is preserved as a control variable, since it continues to be relevant to differentiate economic and social structures of distribution depending on how 'rich' or 'advanced' the country is.
- Total government expenditure of goods and services as ratio to GDP (logarithm transformation) is also used, as it is generally the case that the provision of public services, infrastructure and even employment tends to contribute to lessen inequality pressures.[31]
- Dummy variables distinguish the more developed from the least developed economies

Table 2: Financialization and income distribution - estimation results

Dependent variable =>	(i)	(ii)
Regressands:	Gini coefficient (log)	Palma ratio (log)
Log Financialization ratio	0.0182 ***	0.0547 ***
Log Relative income pc respect to the World	-0.0172 ***	-0.0516 ***
Log Government expenditure of goods and services as ratio to GDP	-0.0792 ***	-0.1357 ***
Dummy variables		
developed countries	-0.2421 ***	-0.4973 ***
developing countries	0.1078 ***	0.3272 ***
Number of observations	2776	2780
R-squared	0.5827	0.5845
Adjusted R-squared	0.5819	0.5838
F-statistic	797.47 ***	913.53 ***

Notes: 1. Estimation period: 1970 - 2015
2. Estimation using Generalized Least Squares and robust standard errors

*** Significant at 1% ** Significant at 5% * Significant at 10%

[31] Complementary, another control variable that was used was the ratio of direct taxation over indirect taxation (mostly value added tax). While this variable turned out to be significant and of the correct sign (greater reliance on direct taxes tends to be more progressive and therefore reduces inequality), is it not included here because the samples of the databases used in one or the other case did cover the same countries.

The estimation output of these regressions is summarized in Table 2. Results confirm that financialization tends to worsen income distribution, leading to rises in both the Gini coefficient and the Palma ratio. Given that the units of measurement of inequality are not normalized (the Gini coefficient can be from 0 to 1 and the Palma ratio from 1 to any number) it is not possible to conclude straightforwardly that the 'financial wealth' effect that the Palma ratio would imply is confirmed in the data. What is to highlight is that both coefficients of financialization on inequality are meaningful and when the effect on inequality is measured by the Palma ratio statistical significance is slightly stronger. Finally, control variables in both equations are significant and yield the expected signs.

Financialization: does it constrain government policy?

The question of whether financialization has a meaningful effect in imposing restraints on government action has a double relevance. First, it is an issue that resonates well in the minds of 'practitioners', policy makers who often face the pressure of 'finance capital'. This can happen through the written text of binding investment agreements or through the implied constraints from accepting the notion that 'trade liberalization' also involves deregulation 'behind the borders'.[32] Second, apart from the issue of reducing 'policy space' and therefore affecting the ability of governments to pursue growth and development strategies consistent with their needs and structural conditions, there can be pressures in the sense of affecting tax regimes (reducing reliance on direct taxes and increasing consumption taxes), calls for primary surplus forcing tight reins on spending, or privatizations as alternative to deficit financing, as cited above. All these measures are known to have noticeable and durable impacts on poverty and inequality.

Hence, to test this question about possible constraints of financialization on government policy, the specifications proposed here mimic the design of the most recent versions of the GPM, which were used for analysis of the 'comprehensive' trade and investment treaties such as the TTIP, the TPP and the CETA.

The general form of the relevant econometric tests can be represented as follows:

$$\boldsymbol{Eq.\ 3\ Government\ policy\ instruments} = \boldsymbol{G}\{\boldsymbol{financialization}, '\boldsymbol{control\ variables}', \boldsymbol{\epsilon}\}$$

Four tests are conducted for four different instruments of government policy:

(i) Government expenditure in goods and services. In this case the relevant 'financialization variable' is external liabilities as ratio to GDP. It is understood that foreign holders of external debt, ie. Financial investors, force or expect governments to restrain government spending in order to reduce or eliminate budgets and hence avert debt traps and instability which could make their assets worthless or subject to default. Thus, the expected sign of this variable should be

[32] Trade and finance ministers tend to be careful with not being accused of 'behind the border' or 'shadow protectionism'. See UNCTAD (2015).

negative.

Since this is a model equation and not a reduced form, instead of 'control variables' the proper term would be 'other structural factors'. These include other variables that are usually affected by the external environment and hence the degree of financialization, such as foreign exchange reserves and the real exchange rate. Both signs should be positive (greater accumulation of external reserves or real exchange rate appreciations should offer additional space for governments to increase spending). Finally, GDP levels and government revenues should have a positive effect as well.

(ii) The second type of equation from this set that captures the effects of financialization on government policy focuses on net transfers and payments, including things like subsidies, unemployment benefits and also interest payments. The instrument carries some ambiguity for the purpose of determining the effect of financialization: while foreign investors are expected to exert pressure for governments to reduce subsidies and social transfers, on the other hand foreign liabilities should lead to higher interest payments. Part of this ambiguity is resolved by choosing the 'inflow' of foreign capital, not the stock of liability as a regressand to denote financialization. Indeed, it is often the case that fresh inflows are directed to pay back interests of inherited debt liabilities. Further, fresh inflows, especially in times of debt distress, carry the conditionality of reducing subsidies and social transfers.

Like above, 'other structural factors' driving net transfers and payments include government revenue, GDP growth and surges of unemployment, all of which are expected the effect of inducing increases of transfers, other things equal.

(iii) The third type of the equations of this set analyses the impact of financialization variables and other structural factors on gross government revenue. Gross revenues include two forms of taxation: direct taxes, which can generally be targeted to be progressive from a distributional point of view, and indirect taxes like VAT which are regressive (to the extent that the poor spend the highest part of their income). In this case, the relevant 'financialization' variable is domestic debt of the public sector, which is an asset of the domestic banking sector. Higher debt induces the government to aim at increasing revenues (this is not the end of the story: as the next equation lays out, governments under the pressure of foreign investors tend to rely on raising indirect taxation, like the value added tax, and not direct taxation).

Real exchange rate appreciations tend to reinforce the need of governments to raise gross revenues from the public, through a complex set of interactions, as noted in section 2. In a nutshell, increases of capital inflows under conditions of greater openness of the financial account leads to appreciations that tend to be accompanied with excessive reserve accumulation at a loss for government institutions.

(iv) The fourth type of equation focuses the inquiry of effects of financialization on the rate of indirect taxes. The most apt variable to denote financialization in this context is the aggregate of private foreign portfolio liabilities, the major

component of the external liability position. These include short term external lending and other forms of portfolio investment. It is expected that foreign investors will aim at ensuring that governments strengthen their ability to raise revenues. To the extent that foreign companies operating in a country (usually belonging to the same holdings that provide loans) tend also to extract discounts on direct taxes, the corollary is that the pressure for the governments to raise local taxes and pay debts is to raise indirect taxes.

Additional structural variables influencing the rate of indirect taxation include benefits from primary commodity exports or other windfall gains that lessen the pressure on governments to raise indirect taxes.

Table 3a: Financialization and government spending and gross revenues: estimation results

Dependent variable =>	**(i)**	**(ii)**	**(iii)**
Regressands:	Δ Log Government expenditure	Δ Log Spending in transfers and interest	ΔD Log Government revenue as ratio to GDP
Log Government expenditure (-1)	-0.1456 ***		
Log Spending in transfers and interest (-1)		-0.0968 ***	
log Government revenue as ratio to GDP (-1)			-0.0790 ***
Log Government debt (-1)	-0.0105 ***		
log Government revenue as ratio to GDP (-1)		0.0444 ***	
Log External liabilities (-1)		-0.0005 *	
Log Government debt as ratio to GDP (-1)			0.0082 **
Log GDP PPP (-1)	0.0158 ***	0.0627 ***	
Δ Log Government debt as ratio to GDP (-1)	-0.0211 *		0.0164 *
Δ Log Capital inflows as ratio to GDP (-1)	-0.0202 *		
Log Real exchange rate (-1)	0.0175 **		
Δ Log External liabilities as ratio to GDP (-1)		-0.0266 *	
Δ Log Real exchange rate REER (-1)			0.0247 *
Δ Unemployment rate		1.2948 ***	
AR(1)	0.2443 ***		
Included observations	36	36	36
Cross-sections	30	30	30
Total pool	1080	1080	1080
R-squared	0.3586	0.1969	0.0831
Adjusted R-squared	0.3365	0.1692	0.0542
F-statistic	16 ***	7 ***	3 ***

Notes:
All specifications were selected after unit-root tests and Kao residual and Johansen-Fisher panel-data cointegration tests were applied.
Given the evidence of cointegration, for the panel of 30 economies, the regressions include variables in levels and first differences.
With the exception of the stationary variable Log RER, coefficients of all other lagged values in levels can be interpreted as long-term effects.
and coefficients of the lagged explained variable in levels can be interpreted as coefficients of error correction.
Results were calculated using Pooled Estimated Generalized Least Square (EGLS) with cross-section weights and White cross-section standard errors
Estimation period: 1970 - 2015
*** Significant at 1% ** Significant at 5% * Significant at 10%

Table 3b Financialization and indirect taxes: estimation results

Dependent variable =>	(iv)
Regressands:	Δ Log Rate of indirect taxes
Log Rate of indirect taxes (-1)	-0.1427 ***
Δ Private portfolio liabilities stock as ratio of lagged GDP	0.0023 *
Δ Exports of energy products as ratio of GDP	-0.0197 **
AR(1)	0.1670 ***
Included observations	36
Cross-sections	30
Total pool	1080
R-squared	0.1124
Adjusted R-squared	0.0844
F-statistic	4 ***

Notes:
The specification is obtained after unit-root tests were applied.
Unit-root tests include (a) ADF and (b) PP Fisher tests,
(c) Levin, Lin & Chu test and (d) Im, Pesaran and Shin test
UR tests confirmed that all variables are stationary,
(in some cases first differences yielded stationary variables)
Results were obtained using Pooled Estimated Generalized Least Square (EGLS) with cross-section weights and White cross-section standard errors
Estimation period: 1970 - 2015
*** Significant at 1% ** Significant at 5%
* Significant at 10%

Results are shown in Tables 3(a,b).[33] The four versions of econometric specifications offer support to the thesis that financialization, which is correlated to the entry in force of investment and trade agreements as confirmed earlier, influences critical government policy instruments. Unlike the previous two sets of equations financialization here is represented by specific variables of the UN GPM, which are nonetheless subsets of external or domestic liabilities. The econometric estimations of the GPM corroborate the influence of the selected variables on the determination of government expenditure, gross government revenues, transfers, subsidies and payments, as well as on the rate of indirect taxation. From this perspective, the data suggest that the process of financialization induce a series of pressures and mechanisms that eventually constrain government policy. Moreover, in so far as some of the government policy instruments that are affected by financialization have immediate relevance to the net income and government services received by the majority of the population, the end effect is also an increase of inequality.

[33] The first three equations are presented (table 3a) are presented in a different template than the fourth equation (table 3b) because of the additional considerations regarding cointegration vectors, while the fourth equation involves only variables that are stationary (of 'order zero').

The consolidated result of these econometric exercises can be summed up as follows: trade and investment agreements, particularly during the last two to three decades in which trade deals became more comprehensive and investment deals contemplated freer flows of short term and private capital, have contributed significantly to the greater financialization observed in the previous section. In turn, such acceleration and diffusion of financialization is confirmed to have a negative impact on income distribution, as well as the effect of constraining government action. These effects are contained in the design and estimation of the UN Global Policy Model.

4. CONCLUSIONS: POLICY DILEMMAS IN THE ERA OF 'PARTNERSHIP' AGREEMENTS

The scrutiny of the macroeconomic patterns induced by the globalization process over the past few decades is a task that requires huge amounts of data, solid theoretical foundations, and analytical and empirical formulations that can help distilling the main mechanisms at work. This seems to be a precondition to orient economies towards the objectives that all policy-makers agree: development, welfare, equality, growth, stability. But economic data is imperfect and incomplete; economic theories can be driven more by interests than by reasoning, and analytical and empirical formulations are, by construction, partial.

These are the conditions that affect research about the potential impact of new generations of trade and investment agreements, as well as, more generally, about the impact of the predominance of global finance on economic and social affairs. Recognition of these limitations is a must. And yet, given such limitations the research conducted by the authors of this paper leads to an unequivocal conclusion: such 'partnership' agreements, and in general the observed financialization process, are detrimental to income distribution and to policy space.

This paper provides a few handles that should help raise critical awareness of policy-makers. First, the analysis of global macroeconomic dynamics should be based on a degree of rigorous observation of recent history, even if data and empirical tools are imperfect. It cannot be based on a belief in models that ignore such realities and assume full employment, perfect competition, fair distribution based on fair compensation to productivity, etc. Models based entirely on abstractions, like the neoclassical models used to justify the mentioned trade and investment agreements, can be ignored at no cost to effective policymaking.

Second, the alternative model illustrated here, the UN Global Policy Model is an imperfect tool that runs on imperfect data. But it is based on a careful examination of various dimensions of economic phenomena. It is designed to capture more mechanisms at work than the trade-only models used by the trumpeters of liberalization. From its emphasis on reality-checks and from its comprehensive design that considers trade, finance, macroeconomic policy, income distribution, employment, etc, the GPM is more suitable to the analysis of comprehensive trade and investment agreements.

Third, even if it is conceded only partially that the authors of this study are right in asserting that the modern-era liberalization agreements may bring hardship for the majority of the people and unbearable pressure on their governments, policy-makers should be more cautious than ever for one additional reason: such deals do not offer easy exit options on paper, and from a practical point of view, it could be argued that there are no exit options at all.

In the years before the proliferation of trade and investment liberalization agreements that triggered the apparently unrelenting pace of financialization observed in this paper, the key message in vogue was 'international policy coordination'. Now that the globalization process seems to be more openly questioned, perhaps it is time to reinstate the notion of coordination as a framework that does not tie governments for the foreseeable future to accept conditions which will most probably affect their populations irreversibly.

REFERENCES

Akyüz Y 2015. Foreign Direct Investment, Investment Agreements and Economic Development: Myths and Realities, *South Centre Research Paper* 63

Akyüz Y 2017. *Playing with Fire. Deepened Financial Integration and Changing Vulnerabilities of the Global South.* Oxford: Oxford University Press.

Baker D, Epstein G, Pollin R 2000. *Globalization and Progressive Economic Policy*. Cambridge: Cambridge University Press.

Bodea C, Ye F 2017. 'Bilateral Investment Treaties (BITs): The Global Investment Regime and Income Inequality in Developing Countries'. Paper proposed for the 2017 Political Economy of International Organizations Conference.

Capaldo J 2015. 'The Trans-Atlantic Trade and Investment Partnership: European Disintegration, Unemployment and Instability, *Economia e Lavoro* No. 2

Capaldo J, Izurieta A 2018. Macroeconomic Effects of 21st Century Trade and Investment Agreements: The Case of the Trans-Pacific Partnership, Development and Change, forthcoming. URL: https://doi.org/10.1111/dech.12404

Choudhary B, Kulkarni P 2012. 'Re-crafting Bilateral Investment Treaties in a Development Framework: A Comparative Regional Perspective', in Deshpande A (ed) *Capital Without Borders. Challenges to Development*. London: Anthem Press.

Cobham A, Schlogl L, Sumner A 2015. 'Inequality and the tails: The Palma proposition and ratio revisited'. DESA Working Paper No. 143, ST/ESA/2015/DWP/143, United Nations, New York.

Correa C, Kumar N 2003. *Protecting Foreign Investment. Implications of a WTO Regime and Policy Options*. New Delhi: Zed Books.

Cripps F, Izurieta A 2014. 'The UN Global Policy Model (GPM): Technical Description'. UNCTAD. Available at http://unctad.org/en/PublicationsLibrary/tdr2014_GPM_TechnicalDescription.pdf

Davies JB, Sandström S, Shorrocks A,Wolff EN 2011. 'The level and distribution of global household wealth'. *The Economic Journal*, 121(551): 223–254.

De Souza 2015. Regional Trade Agreements database. Available at : http://jdesousa.univ.free.fr/data.htm#RegionalTradeAgreements

De Ville F, Siles-Brügge G 2016. *TTIP. The Truth about the Transatlantic Trade and Investment Partnership*. Cambridge (UK): Polity Press.

Della Giusta M, Kambhapati U, Wade RH 2006. *Critical Perspectives on Globalization.* Cheltenham: Edward Elgar Publishing.

Dodig N, Hein E, Detzer D 2016. 'Financialisation and the Financial and Economic Crises: Theoretical Framework and Empirical Analysis for 15 Countries', in Dodig N, Hein E, Detzer D (eds) *Financialization and The Financial and Economic Crises: Country Studies.* Cheltenham: Edward Elgar Publishing.

Eatwell J, Taylor L 2002. *International Capital Markets. Systems in Transition.* Oxford and New York: Oxford University Press.

Epstein G 2005. *Financialization and the World Economy*. Cheltenham: Edward Elgar Publishing.

Galbraith JK 2012. *Inequality and Instability. A Study of the World Economy Just Before the Great Crisis.* Oxford and New York: Oxford University Press.

Galbraith JK 2012. *Inequality and Instability: A Study of the World Economy Just Before the Great Crisis*. New York and Oxford: Oxford University Press.

Gallagher KP (2010). Policy Space to Prevent and Mitigate Financial Crises in Trade and Investment Agreements. G-24 Discussion Papers No. 58. United Nations Conference on Trade and Development.

Gallagher KP and Stanley L, eds. (2013). *Capital Account Regulations and the Trading System: A Compatibility Review*.

Ghosh J 2013. 'The Dangers of Fiscal Austerity'. *Frontline* vol 30 (04) February. Reproduced in Network IDEAs, available at: http://www.networkideas.org/news-analysis/2013/03/the-dangers-of-fiscal-austerity/

Hein E 2012. *The Macroeconomics of Finance-Dominated Capitalism – And its Crises.* Cheltenham: Edward Elgar Publishing.

Helleiner E 1994. *States and the Reemergence of Global Finance. From Bretton Woods to the 1990s*, Ithaca: Cornell University Press.

Hudson M 2015. *Killing the Host. How Financial Parasites and Debt Destroy the Real Economy.* Baskerville: ISLET

Kaldor N 1956. Alternative Theories of Distribution. *Review of Economic Studies* Vol 23(2) No 61, 83-100.

Kaldor N 1964. *Essays on Economic Policy. Volume II: Policies for International Stability*. London: Gerard Duckworth & Co Ltd.

Kalecki M [1944] 1967. *The Economics of Full Employment: Six Studies in Applied Economics*. New York: Basil Blackwell.

Kaminsky G, Reinhart CM 1999. 'The Twin Crises: The Causes of Banking and Balance-of-Payments Problems', *American Economic Review*, Vol 89 (3).

Keynes JM [1936] 1997. *The General Theory of Employment, Interest, and Money*. Amherst (NY): Prometheus Books.

Kohler P, Storm S 2016. 'CETA without Blinders: How Cutting "Trade Costs and More" Will Cause Unemployment, Inequality, and Welfare Losses', *International Journal of Political Economy* Vol 45(4):257–293.

Kregel J 2014. 'Some Risks and Implications of Financial Globalization for National Policy Autonomy', in Kregel J, Kattel R (eds) *Economic Development and Financial Instability.* London: Anthem Press.

Lahoti R, Jayadev A, Reddy S 2014. 'The Global Consumption and Income Project (GCIP): An overview'. *New School for Social Research Working Paper* No. 1402.

Michell J, Toporowski J 2013. 'Critical Observations on Financialization and the Financial Process, *International Journal of Political Economy*, Vol 42 (4), pp 67-82

Minsky HP [1963] 1982. *Can "It" Happen Again? Essays on Instability and Finance*. Armonk (NY): Routledge.

Minsky HP [1975] 2008. *John Maynard Keynes*. New York: McGraw-Hill.

Minsky HP 1986. *Stabilizing an Unstable Economy*. New Haven: Yale University Press.

Ortiz I, Cummins M, Capaldo J, Karunanethy K 2015. 'The Decade of Adjustment: A Review of Austerity Trends 2010-2020 in 187 Countries', ESS Working Paper Series, No. 53, ILO.

Palma JG (2011). 'Homogeneous middles vs. heterogeneous tails, and the end of the "Inverted-U": The share of the rich is what it's all about'. *Cambridge Working Papers in Economics* No. 1111. Cambridge, University of Cambridge.

Pasinetti L [1974] 1979. *Growth and Income Distribution: Essays in Economic Theory.* Cambridge: Cambridge University Press.

Patnaik P 2006. 'Financial Flows and Open Economy Macroeconomics', Paper presented at International Development Economics Associates (IDEAS) and United Nations Development Programme (UNDP) Conference on 'Post Liberalisation Constraints on Macroeconomic Policies', Muttukadu, Chennai, India 27th-29th January

Patnaik P 2006. 'Financial Flows and Open Economy Macroeconomics', paper presented at Network IDEAs and UNDP conference *Post Liberalization Constraints on Macroeconomic Policies*, Chenai, India, 27-29 January.

Polak J 1957. 'Monetary Analysis of Income Formation and Balance of Payments Problems', *IMF Staff Papers* Vol 6(1).

Piketty T 2014. *Capital in the Twenty-First Century.* Cambridge, MA, Harvard University Press.

Raza W, Grumiller J, Taylor L, Tröster B, von Arnim R 2014. *Assess_TTIP: Assessing the Claimed Benefits of the Transatlantic Trade and Investment Partnership*. Wien: OFSE.

Reinhart CM, Rogoff KS 2010. 'Growth in a Time of Debt'. *American Economic Review: Papers & Proceedings*, 100.

Rosnik D 2013. *Gains from Trade? The Net Effect of the Trans-Pacific Partnership Agreement on U.S. Wages.* Washington DC: Center for Economic and Policy Research.

Scott R 2013. 'No Jobs from Trade Pacts', *Economic Policy Institute Brief*. Washington DC.

Stiglitz JE 2013. *The Price of Inequality.* London: Penguin Books

Stockhammer E 2013. 'Financialization and the World Economy', in Epstein G and Wolfson M (eds) *The Handbook of the Political Economy of Financial Crises.* New York: Oxford University Press.

Storm S 2018. 'Financialization and Economic Development: A Debate on the Social Efficiency of Modern Finance', *Development and Change* 49(2): 302–329. DOI: 10.1111/dech.12385.

Storm S, Naastepad CWM 2016. 'Myths, Mix-ups, and Mishandlings: Understanding the Eurozone Crisis', *International Journal of Political Economy*, vol 45(1), pp 46-71, DOI:10.1080/08911916.2016.1159084

UNCTAD 2011. *Report of the Secretary-General of UNCTAD to UNCTAD XIII: Development-led Globalization: Towards Sustainable and inclusive Development Paths*. United Nations publication. New York and Geneva.

UNCTAD 2015. *Trade and Development Report 2015*. New York and Geneva: United Nations Publications.

UNCTAD 2017a. *Trade and Development Report 2017*. New York and Geneva: United Nations Publications.

UNCTAD 2017b. Bilateral Investment Treaties database. Available at: http://investmentpolicyhub.unctad.org/IIA

Varoufakis Y 2016. *And the Weak Suffer What They Must? Europe, Austerity and the Threat to Global Stability*. London: Penguin Random House UK.

Vasudevan R 2016 'Financialization, Distribution and Accumulation: A Circuit of Capital Model with A Managerial Class', *Metroeconomica, Special Issue on Inequality: Causes, Consequences and Policy Responses*. Vol 67(2) May, pp.397-428.