The Imprudence of Labour Market Flexibilization in a Fiscally Austere World

Jeronim Capaldo and Alex Izurieta

Abstract

This paper assesses the effects of combining fiscal austerity with flexibilization policies aimed at reducing labour costs and increasing competitiveness. Core to our analysis is a global perspective where the aggregation problem is fully taken into account. We derive a stylized macroeconomic framework of distributive and demand dynamics. We show that even in export-led regimes, after considering global feedbacks, flexibilization policies do not lead to higher income and employment. Rather, the end result is contractionary. Over time, the world economy is essentially wage-led and responds positively to coordinated Keynesian stimuli.

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Summary

This paper assesses the effects of combining fiscal austerity with flexibilization policies aimed at reducing labour costs and increasing competitiveness. Core to our analysis is a global perspective where the aggregation problem is fully taken into account. The issue has been tackled in various ways. The negative synergies caused by a synchronized shift towards contractionary fiscal policies are well known. A strategy in which individual countries seek to increase their own income and employment via competitive gains in trade was criticized by Joan Robinson as "new mercantilism". It has also been suggested that labour market reforms seeking competitive advantages in labour-intensive manufacturing trade are affected by a "fallacy of composition". Yet, understanding the full implications of these labour market reforms requires formal analyses of distributive and demand dynamics. Critical to these frameworks are the differentiable effects of productivity gains on output and employment in wage-led and profit-led regimes. In profit-led regimes, it is argued that policies which pursue international competitiveness and reduce unit labour costs may lead to higher income and employment. In this study, we expand such analyses to a globally consistent setting. Our central conclusion is that even in profit-led regimes, where initial net gains via export growth may follow from a wage squeeze and a tight fiscal stance, the end result is contractionary. The inverse is also true, and evokes Keynes' critique of mercantilism: only the simultaneous pursuit of full employment policies by all countries together can restore economic health and strength internationally.

"The more a country makes use of wage-cutting, or exchange depreciation, or of protection, the harder is employment to be maintained in the rest of the world."

Joan Robinson, *Collected Economic Works*, Vol. I, p. 205

Introduction

By early 2012, the prospects of a sustained global recovery from the Great Recession remain in doubt. Meanwhile, pressed by either their country's circumstances or their own political beliefs, most policy makers have assumed the role of guardians of fiscal prudence. Nowhere is this more evident than in the euro area where, without central institutional means to avert government insolvency, severe fiscal austerity of national budgets is portrayed as the only available policy option. In the prevailing view, lower fiscal balances would restore business and consumer confidence leading to a revival of private investment and consumption. Essentially, the initial loss of aggregate demand would be compensated by an increase in private spending or exports.

Several critiques of this approach have been made. For example, some studies point out that pre-mature fiscal contractions may be self-defeating as deficits would likely worsen with slower revenue growth and greater unemployment costs (UN DESA, 2012). Other studies show that the events that called for fiscal stimulus in the trough of the financial crisis – private sector deleveraging and bottlenecks in the credit and labour markets – are still unfolding (Ball, Leigh, Loungani, 2011; Burke, Irvin, Weeks, 2011; Izurieta, 2011; King, *et al.*, 2012; Pollin, 2011, Papadimitriou, Gannshen, Zezza, 2011; Sawyer, 2012; UNCTAD, 2011).

Policy-makers in most member countries of the Organisation of Economic Co-operation and Development (OECD) have cast their dice and show no intent of backing down from fiscal austerity, while a mighty challenge has emerged in the labour markets. Many economies have now lost the small gains achieved when the crisis was first met with cash injections and employment promotion policies. According to Eurostat,[1] employment ratios in European countries, except Austria, Germany, Luxemburg and Malta, are lower than before the crisis. In the so-called "periphery" of the euro area and a few other countries, the fall in employment is particularly severe, with gaps in employment ratios (compared to pre-crisis levels) averaging 11 points in Ireland; 7-8 points in Greece, Latvia and Spain; and 2.5 points in the United Kingdom of Great Britain and Northern Ireland and the Netherlands. The average gap for the OECD is 4 points, with Australia and Japan at the lower end, around 1 point. In the United States of America, where the stimulus reversal began in 2012 and is expected to continue in 2013, the employment-to-population ratio was around 58.5 percent by early 2012, an improvement over the 57.5 percent low of the previous year but significantly lower than the 63 percent peak of 2007.[2]

In the ensuing quest for employment growth, the few successful performers, most prominently Germany, have become role models. However, most praises overlook the employment protection schemes that helped keeping workers employed in Germany and a few emerging economies (UN DESA, 2010). Rather, the emphasis has been on another policy recommendation: flexibilize the labour market. The logic of such a policy option has notable parallels with prescriptions by Bretton Woods institutions in developing countries during the epoch of "structural adjustment". If government spending is tied by fiscal austerity and

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households cannot be expected to be meaningful demand-drivers,[3] growth and employment can only be driven by net exports and investment. With domestic sales facing sluggish consumer demand, the brunt of the recovery should be borne by export-related sectors. Obstacles to competitiveness, in particular labour rigidities, must therefore be eliminated, hence the emphasis on flexibilization. Employment gains are supposed to follow, based on textbook representations in which labour supply and demand curves identify a unique full-employment wage that is naturally reached. By removing collective bargaining and high severance payments for permanent workers, reducing excessive wage demands and cutting unemployment benefits and tax wedges, all of which tend to artificially increase unit labour costs, it is argued that labour demand will rise and unemployment will fall (see, for example, Jaumotte, 2011).

Accordingly, many countries have started to lift employment protection warranties and weaken minimum wage regulation and other entitlements, while cutting public sector jobs in observance of fiscal austerity. A recent reform in Spain weakened limitations for worker dismissals, while similar proposals are being discussed in Italy as part of a "strategy for growth". It has been reported that labour reforms in these two countries responded to requests made by the European Central Bank (ECB),[4] with the pledge that reducing the legal force of collective wage-bargaining, increasing wages' downward flexibility and weakening labour protection, including minimum wages, would help restore investors' confidence and favour purchases of government bonds. In Greece, the package of policies implemented prior to receiving the second bailout from the European Union included a 20 per cent reduction of the minimum wage. These developments reinforce a trend which started with the crisis. According to OECD's indicators, labour protection has become weaker across OECD countries in recent years. The concrete measures labelled 'labour market flexibilization' may vary from country to country, but they all translate into labour-saving productivity increases and reductions of unit labour costs, aimed at higher international competitiveness. For countries tied by a common currency, this is seen as the only means to ensure a net-export stimulus.

Problems with competitiveness-led, export-driven growth

While the goals of productivity and cost optimization are intrinsic to economic development and growth performance, their value as a panacea or even pre-conditions for growth can be questioned on various grounds. First, it has long been established, both in the Keynesian tradition and in the 'endogenous growth' literature, that such goals are the results, rather than the pre-conditions of growth and development. As noted in McCombie and Thirlwall (1994), endogenous growth theories underscore increases in, among other things, investment, education and research (M. FG. Scott) and in some cases are a requirement for "economies of scale" (E. F. Denison). Keynesians stress "learning by doing" and increasing returns allowed by economies of scale, following Young (1928), Verdoorn (1948), Kaldor (1984), Kaldor and Mirrlees (1961).[5] In this vein, Galbraith (2012) revisits the success of the Scandinavian experience of high employment with high wages and productivity drawing from the Meidner-Rehn model. Labour protection aimed at securing high and fairly distributed wage remunerations can, when accompanied by active demand and investment policies, result in a rapid expansion of innovative firms and thus of further technological development. What

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3   A deleveraging bias of households in developed countries would be the equivalent of a containment of inflation-prone consumption in developing countries under structural adjustment.

4   See El Pais, 2011, December 7 (http://elpais.com/elpais/2011/12/07/inenglish/1323238849_850210.html, accessed on March 23, 2012); and *Il Corriere della Sera*, 2011, September 29 (http://www.corriere.it/economia/11_settembre_29/trichet_draghi_inglese_304a5f1e-ea59-11e0-ae06-4da866778017.shtml?fr=correlati, accessed on March 23, 2012).

5   See UN DESA (2006) for a development perspective of this approach.

is more, it is on this basis that export-promotion policies can contribute to expanding to wider markets, becoming durable sources of demand and innovation. This approach is further validated by the author's vast empirical analysis of wages and labour flexibility in the European economies. Galbraith concludes, "…casting grave doubt over the idea that unemployment in European countries can be explained by a failure of their wages to fall, or that unemployment can be remedied in general by policies aimed at cutting relative wages. For if this were true, cases would be observed. And we find (almost) none" (p. 213).

Second, analytical frameworks in which labour demand is derived from income and the conditions of demand in product markets make an unequivocal case for income policies as pre-conditions for sustained productivity improvements (Davidson 1998, 1983; Dutt 2006). Weeks (2012) devotes the first eleven chapters of his book to undermine the proposition that free markets tend to full employment as soon as the real wage is allowed to fall. His basic argument can be simply stated: unemployment does not necessarily (and usually does not) result from "false trading" in labour markets at higher than equilibrium wages, but from false trading in other markets. Among these, Keynes focused on capital markets, hence the attention to uncertainty and expectations in the General Theory.[6] As disequilibrium in any market occurs, it translates into the level of effective demand. Thus, demand management policies can help correcting deficiencies, including policies aimed at increasing, rather than reducing, labour income. In this case, however, if full employment is achieved, it is via the markets for goods and services and not the labour market *per se*.

Storm and Naastepad (2012) highlight a series of mechanisms by which higher wages raise profitability favouring consumption and investment. Higher wages stimulate demand exerting upward pressure on capacity utilization, possibly leading to further self-sustained increases in the presence of investment accelerator responses. Productivity then increases as the newly installed equipment embodies the latest technology, which leads to an economy-wide deepening of the division of labour and more rapid learning-by-doing. Moreover, as these effects tend to drive up labour costs, they induce firms to develop and adopt labour-saving techniques.[7] In the following sections, we analyze the implications of such arguments in a globally consistent framework.

Third, the attempt by one country to increase economic activity by reducing unit labour costs has implications on global income. Gains in export markets obtained by cutting relative prices dampen production and income in partner countries, prompting Joan Robinson to criticise such practices as 'new mercantilism' (Blecker, 2005). Patnaik (2007) advances this argument by noting that technological progress makes its way to developing economies in a fairly short time, and quite uniformly, as macroeconomic policy stances have been relatively homogenized. Thus, GDP growth becomes heavily influenced by export competitiveness, where increases of labour productivity result from relocation of existing technologies, depending on the degree of wage compression as the only differentiable aspect between countries.

Cripps, Izurieta, Singh (2011) proposes a framework that traces the effects of lowering [wage] income in some world regions by taking the world economy as a closed system. Since the world's current accounts sum to zero, spending (and its counterpart accumulation of financial assets) is tied by stable stock/ flow relations to expected income, as well as wealth targets. As realized income and the effective value of wealth are not known in advance, world income may exceed or fall short of its expected level, leaving some countries with greater than expected external imbalances. In other words, when one country aims at increasing its export market share by improving productivity, world income could continue growing at the expected

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6   In Weeks' view, this was a point prominently stated by Leijonhufvud in his 1968 work: 'On Keynesian Economics and the Economics of Keynes'.

7   Galbraith (2008) provides examples of these mechanisms at work in Western Europe.

pace only as long as larger deficits in the losing countries could be sustained. Thus, public or private institutions in losing countries have to incur increases in borrowing or asset sales in order to maintain spending and investment patterns. However, none of these options are sustainable. Eventually, either by shock or by a continuing deceleration of domestic spending in losing countries, world income will slow down or fall, thereby reducing the expectation of export surpluses in the more competitive country. These observations resonate well with recent experiences.

Fourth, while the global interactions noted above are consistent at such level of aggregation, other studies have embarked in assessing the potential success of trying to replicate concrete export-driven growth. These studies expand on the question of "fallacy of composition" that typically affects exporters of primary commodities when they find themselves out-competing others by lowering prices in a global environment of relatively rigid demand (see, for example, UNCTAD 1993, 'Part Two', chapter II). Instead of extractive or agricultural activities facing a relatively rigid global demand, the issue at stake now is labour-intensive industries facing more elastic global supply and demand patterns. More specifically, the question is whether competition on labour costs and productivity in manufacturing can be successful despite downward pressure exercised on global income and employment. Akyüz (2003) and Mayer (2002) review this literature and global modelling exercises. After considering many factors that range from skill profiles to tariffs and other policies, Akyüz explicitly concludes that although the picture is "complex and nuanced … there is enough evidence that there might be a risk of excessive competition among developing countries in world markets for labour-intensive products … thus causing significant terms of trade stresses and creating frictions in the global trading system" (p. 113).

A more recent investigation (Razmi, Blecker, 2006) revises the export-specialization experience of eighteen industrializing emerging countries vis-à-vis the ten top importers in the developed world and tests the "fallacy of composition" using two- and three-stage linear regressions on a panel dataset, taking into account various characteristics of exporting and importing countries. The authors find a significant difference in the degree to which the adding-up problem affects export performance: a small number of countries exporting high-technology products are less negatively affected by competition than those exporting low(er)-end products. Perhaps more notably, the study suggests that "[i]f the industrialised countries' markets do not grow fast enough to accommodate the developing countries' targets for the growth of their exports of manufactures … then the latter countries as a group will not all be able to achieve their respective export objectives. In other words … the success of some developing countries in export promotion must come at the expense of failure for others" (p. 2).

In sum, solid evidence points to contractionary effects of policies focused on lowering labour costs. Despite the individual and perhaps ephemeral successes of a few export winners, the world economy has much to lose from following a path where the incomes from labour are systematically reduced *a priori*. But exploring this hypothesis fully requires an analysis of income distribution dynamics in a macro-framework where productivity and output growth are explicitly modelled and where the additional problem of a relatively synchronized fiscal contraction is considered.

The quest for employment growth in analytical terms

The starting point of our analysis draws from Taylor and Vos (2002).[8] An economy, and by extension the world economy, can be disaggregated into sectors that differ in terms of technology, labour requirements,

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8   See Appendix, pp. 47 ff.

productivity, etc. Using N for total population and L for employment, the first variable of interest will be the 'employment to population ratio'[9] η:

$$(1a) \qquad\qquad \eta \equiv \frac{L}{N}$$

Further, using X for output (and X_i for the output of sector i) we can define sectoral output per capita with a lower-case x_i, the labour-output ratio as b_i and productivity as ρ_i:

$$(1b) \qquad\qquad x_i \equiv \frac{X_i}{N}$$

$$(1c) \qquad\qquad b_i \equiv \frac{L_i}{X_i}$$

$$(1d) \qquad\qquad \rho_i \equiv \frac{X_i}{L_i} = \frac{1}{b_i}$$

It is thus straightforward to derive the employment-to-population ratio, in terms of output per capita and productivity:

$$(1) \qquad\qquad \eta \equiv \sum_i \frac{L_i}{X_i} \frac{X_i}{N} \equiv \sum_i \frac{x_i}{\rho_i}$$

Expressing rates of change as $\hat{\eta} \equiv \Delta\eta \big/ \eta_{t-1}$, after simple manipulations, the following describes a basic decomposition that relates changes in the employment ratio to changes in output and changes in productivity:

$$(2) \qquad\qquad \hat{\eta} \equiv \frac{\Delta\eta}{\eta} = \sum_i \frac{\eta_i}{L/N}(\hat{x}_i - \hat{\rho}_i) = \sum_i \frac{L_i}{L}(\hat{x}_i - \hat{\rho}_i)$$

Therefore, the employment ratio for a country or the world as a whole is determined as the "labour-weighted" (L_i/L) average of the sectoral or country differences between the growth of output per capita and productivity growth. Thus, for global employment to continue rising, the growth of output *per capita* must outpace productivity growth in at least some countries. The expansion in rapidly growing economies must make up for employment losses in economies where output per capita grows at a slower pace than productivity. Only under these conditions is there no trade-off between the growth of total employment and the growth of productivity.[10] As the growth of output goes hand-in-hand with the growth of income and, in turn, relates to the distribution of factor incomes as growth proceeds, the quest for employment creation in a global context calls for an analysis of the dynamics of output as distributive shifts are transmitted between countries.

Dynamics of production, distribution and price formation

We postulate a general form of the production system with constant returns to scale (an assumption revised further down) derived from Taylor (2004, pp. 235 ff), to be interpreted as a "technical progress function". In

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9   Instead of employment-to-population ratio, specialized studies tend to privilege the use of 'employment rate' defined as ratio of employment to labour force. But since the definitions of labour force vary from country to country, including the age-group for the basis for its calculation, the former statistic seems more transparent at this level of analysis.

10   The analytical finding captures well the known 'unlimited supply of labour' thesis postulated by earlier development theorists following W. A. Lewis. In Kaldor's (1984) words: "an expansion of the demand for labour in a fast-growing sector may cause a transference of labour from other sectors without adverse effects on the amount produced in those latter sectors, other than a concentration of output among a smaller number of firms" (p. 26).

symbols, and omitting for the moment the suffices indicating sectors or different economies, the growth rate of productivity proposed is:

(3) $$\hat{\rho} = \phi(u, \lambda)$$

where u, output per unit of capital, or 'capacity utilization', and λ, unit labour costs as:

$$u \equiv X\!\big/\!K$$

$\lambda \equiv \omega b$ ω: real wage claims (= w/P); where P is the price level;[11]

b: labour-output ratio, as in (1c)

thus ωb : unit labour cost or wage share of real output

As demonstrated elsewhere, expression (3) in linear form could also be derived from a neoclassical constant elasticity of substitution function.[12] We assume $\phi'_u > 0$, denoting the Kaldor-Verdoorn effect by which growth of demand triggers economies of scale leading to faster growth of productivity. Likewise, we assume $\phi'_\lambda > 0$ to express the stylized fact that higher labour costs induce labour-saving innovations that increase productivity.

Complementing equation (3), real wage growth is assumed to include two components: workers' claims and what is left of productivity growth after a share θ, $0 < \theta < 1$, is passed through to higher profits:

(4) $$\hat{\omega} = h(u, \lambda) + (1 - \theta)\hat{\rho}$$

Storm and Naastepad (2012, chapter 6), after conducting a series of econometric tests in OECD countries conclude that θ varies from 0.54 to 0.64, in line with several other empirical studies.

Wage pressures increase with higher capacity utilization and decrease at higher levels of labour costs, making partial derivatives of the first term in the RHS $h'_u > 0$ and $h'_\lambda < 0$. To the extent that $\hat{\lambda} = \hat{\omega} + \hat{b}$ and $\hat{b} = -\hat{\rho}$, wage claim dynamics in (4) can be transformed into an equation relating the wage share to distributional claims:

(5) $$\hat{\lambda} = \hat{\omega} + \hat{b} = h(u, \lambda) - \theta\phi(u, \lambda)$$

The steady state reflects situations where the distributional strife ceases as the real wage grows with productivity: $\hat{\omega} = \hat{\rho} \implies \hat{\lambda} = 0$. Its locus can be represented graphically on the (u,λ) plane, as in Figure 1.

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11   Ex-post price determination is explained below. The real wage claim in this section is understood as the ex-ante bargain which, in the steady state derived further below, rises with the growth of productivity.

12   See Storm and Naastepad (2012, pp. 79 ff. Appendix to chapter 3) for a demonstration. In passing, it should be noted that the production system proposed here has omitted, intentionally, a third factor of a presumed positive impact on productivity growth, which was included in the work cited: labour market regulation (or more generally, institutional development). The reason is obvious, we should not impose as an assumption something that is bound to be investigated in this paper.

Figure 1: A stable distributive locus for given capacity utilization and unit labour costs
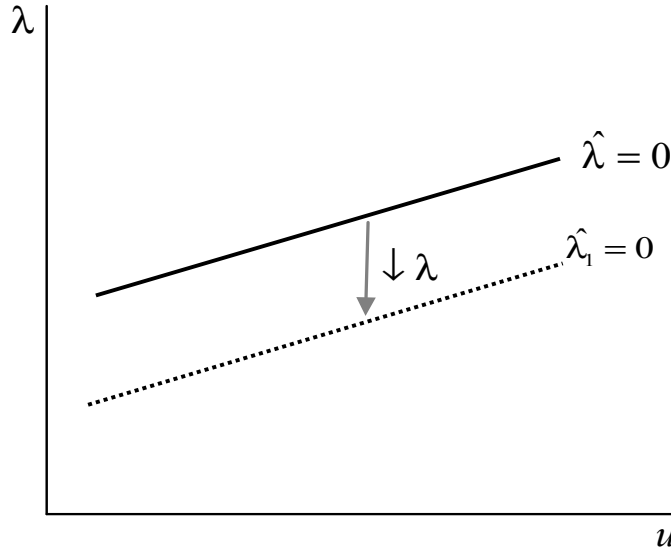
A positive (and not very steep) slope of the distributive curve denotes the usual profit squeeze process at higher levels of capacity, or its counterpart wage-repression process at lower levels of employment.[13] Readers will find its economic meaning analogous to the Philips curve, which could be represented in the standard diagrammatic form by transforming capacity utilization into unemployment in the horizontal axis. As pointed out by Taylor (2004), to reduce this to a NAIRU level of capacity utilization would require far more restrictive assumptions than generally observable.

Exogenous cuts in unit labour costs, resulting for example from lifting labour or wage protection legislation, will shift the stable distributive locus downwards. Workers' attempts to regain wage increases at par with productivity growth will start from a lower labour share basis.

Outside the steady state, distributive dynamics depend simultaneously on:

$$(6) \qquad \hat{\lambda}'_\lambda = h'_\lambda(u,\lambda) - \theta \phi'_\lambda(u,\lambda)$$

and

$$(7) \qquad \hat{\lambda}'_u = h'_u(u,\lambda) - \theta \phi'_u(u,\lambda)$$

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13 We are indebted to Servaas Storm for making this point explicit. The conditions for the slope of the curve are derived from:

$$\hat{\lambda} = 0 \quad \Rightarrow \quad \frac{\partial \hat{\lambda}}{\partial u} du + \frac{\partial \hat{\lambda}}{\partial \lambda} d\lambda = 0$$

$$\frac{du}{d\lambda} = -\frac{h'_\lambda - \theta\phi'_\lambda}{h'_u - \theta\phi'_u} = -\left(\frac{-}{+}\right) > 0$$

Under the assumptions proposed above, the numerator is negative (see Taylor, 2004, pp. 235 ff. for a full discussion). The critical assumption for the denominator to be positive and thus the slope of the curve to be positive is $h'_u > \theta\phi'_u$. Indeed, as economies get closer to full capacity, workers' claims for faster wage increases are likely to be stronger than the ability of employers to obtain a pass-through benefit from innovation as technical progress takes time to mature. On the other hand, there could be situations of high capacity utilization where firms manage to push up productivity at a substantially faster pace than wage claims. In these, perhaps more abnormal cases, we will see a near vertical or even backward sloping distributive curve.

We will assume that distributive dynamics are locally stable: movements from the distributive curve rightwards, to points representing "excess utilization", will trigger inflationary pressures; meanwhile, movements from the distributive curve leftwards, to points representing underutilization of capacity, will trigger deflationary pressures. Both pressures will bring the economy back to a steady state. Analytically, distribution dynamics are locally stable if movements out of the steady state are self-correcting:

$$(8) \qquad \frac{\partial \hat{\lambda}}{\partial \lambda} < 0$$

From (6), this condition requires that the share of productivity increases passed through to the profit share, θ, is relatively "large" and/or technical progress responds to changes in labour share in a relatively strong fashion compared with the response of real wage claims. In addition, it follows from equation (7) that transition dynamics will have to be consistent with effective demand linkages, where λ, the wage share, and u, capacity, are interrelated. These are considered in the next section.

Finally, to obtain a parsimonious representation of ex-post price formation, the useful starting point is the value-added identity for the aggregate economy:

$$(9) \qquad PX \equiv wL + \Pi$$

where P is the general price level, w the nominal wage rate (hence wL is the wage bill), and P the profit bill.[14] Defining the profit share as $\pi = \Pi/PX$ and recalling that $b = L/X$, further dividing by X we obtain:

$$(10) \qquad P = wb + \pi P \quad \Rightarrow \quad P = \frac{1}{1-\pi} wb$$

This expression can be assumed to represent mark-up price formation under oligopolistic conditions, where entrepreneurs fix a mark-up m over prime costs:

$$(11) \qquad P = (1+m) wb \quad \Rightarrow \quad m = \frac{\pi}{1-\pi}$$

Aggregate demand dynamics and steady state

The analysis of production, costs and prices proposed above still stands after taking into account that demand can be partially satisfied with imports M, which do not generate wage or profit income domestically. Let us postulate the income-demand identity as:

$$(12) \qquad Y \equiv C + I + G + E - M$$

where Y represents GDP,[15] C private consumption, G government expenditure in goods and services, E exports and M imports. By deducting taxes T from GDP we could use $Y_p = Y - T$ to denote private disposable income.

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14   Another way of representing the value-added identity, after defining the profit rate $r = \Pi/PK$, is

$$X = \omega L + rK$$

which is usually associated with a neoclassical real cost function, leading to a similar mark-up pricing rule to the one proposed here (see Walsh, 2003, pp. 232 ff; where the mark-up rule is derived from profit maximization under monopolistic competition).

15   Thus, transfers and payments across borders are omitted for the sake of simplicity.

$$(13) \qquad Y_p \equiv C + I + (G - T) + (E - M)$$

We can now introduce the critical premise that macroeconomic policy stances lean towards fiscal austerity. To simplify the algebra we take this assumption in weak form assuming a neutral budget, hence $G = T$. Defining net exports $Z = E - M$, we obtain:

$$(14) \qquad Y_p = C + I + Z$$

Under our assumption of weak fiscal austerity, taxation is no longer a policy variable and we could take the liberty of referring to Y_p as an after-tax or market-price concept of output.[16] Thus, for simplicity: $X = Y_p$, where X is total supply of goods and services as in the previous section. This will not change our analysis, since the behavioural assumptions on the components of aggregate demand will not be affected once the fiscal stance is determined. Furthermore, we consider a single price deflator for each economy which applies to imports too, while we disregard movements of the exchange rate.[17]

After defining savings $S = X - C$, expression (14) results in

$$(15) \qquad S = I + Z$$

These variables can be independently represented by generally accepted behavioural relations. We postulate a simple investment accelerator function, consistent with the technical progress function proposed above as well as a battery of other supply formulations. In a setting in which the world economy is represented by two groups or countries (i, j), net exports depend on relative costs (the real exchange rate in this setting, without nominal exchange variations) and domestic and foreign income; with each country's imports depending on domestic income and its exports depending on the other country's income.[18] Finally, we postulate that savings are a fraction of profit income.[19] Analytically:

$$(16) \qquad I = (g_0 + \beta u) K$$

$$(17) \qquad S = s\pi X$$

$$(18) \qquad Z_i = Z_i \left(\overset{(-)}{\frac{\lambda_i}{\lambda_j}}, \overset{(-)}{u_i}, \overset{(+)}{u_j} \right)$$

where g_0 is autonomous investment, β is the accelerator parameter, and s the savings rate on profit

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16 An alternative interpretation, considering that $G = T$ would be $Y_p = Y - G \cong X$. In this case X would be supply of private goods and services, assuming away the fiscal stance.

17 The assumption may look very extreme at first, but all the analysis that follows can be replicated, analytically and graphically, by considering that exchange rate shifts represent near-parallel displacements of the cost or distributive functions.

18 It should be noted, as stressed by Francis Cripps in comments on an earlier version, that the net-export function is strongly dependent on country-specific economic structures, like the level and not only the variations of income, the stock of capital, and certainly, the degree of openness. Importantly for the analysis that follows below, institutional changes of smaller or relatively closed economies would have a far more marginal effect on changes of demand and distribution on the 'rest of the world'. This is specifically discussed further below.

19 The reader should be aware that by excluding savings from wage earners there is a greater chance that an economy will behave as wage-led instead of profit-led. Precisely for this reason, the analysis below does contemplate, specifically, profit-led cases.

income. Following Taylor (2004, 1991), putting the pieces together into equation (15) we obtain an explicit function for aggregate demand in terms of capacity and unit labour costs:[20]

$$(19) \qquad s\pi X = (g_0 + \beta u) K + Z \quad \Rightarrow \quad u = \frac{g_0 + \xi[\lambda_i / \lambda_j, \dots]}{s(1-\lambda) - \beta} \quad ; \quad \text{with } \xi \equiv Z/K$$

It is understood that the aggregate demand curve on the (u,λ) plane may take different slopes in different countries, depending on whether changes of unit labour costs have a dominant impact on consumption (through total wage income) rather than on investment and net exports. Cases where aggregate demand is dominated by wage-income are referred to as *wage-led*. In these cases the demand curve has a positive slope. Conversely, *profit-led* refers to situations where a profit squeeze, or an increase of unit labour costs, has a dominantly negative effect on aggregate demand as investment and exports contract. As in these cases, net exports tend to be more responsive than investment (there are obvious limits to investment-driven growth without strong expectations of sales somewhere), these regimes are usually called *export-led*. The curve will have a negative slope.

Under certain conditions, these systems could become unstable. A plausible example could be one of a strong wage-led economy, where a small rise (fall) in the wage share causes a large rise (fall) in aggregate demand, while relatively small rises (falls) of capacity cause strong distributive pressures towards increasing (decreasing) wage claims. Under such relatively restrictive conditions (a positive-sloped and inelastic demand schedule and positive-sloped and steep distributive schedule), a temporary disturbance, causing a decrease in the wage share, could make capacity utilization fall rapidly, reducing the labour share in a downward spiral.[21] In what follows, we will not focus on these situations and will instead concentrate on stable wage-led and profit-led cases. Thus, our system-wide stability condition could be synthetically expressed as:

$$(20) \qquad \left| \frac{\hat{\lambda}_\lambda}{\hat{\lambda}_u} \right| < \left| \frac{1}{u_{\lambda_i}(\lambda_i / \lambda_j)} \right|$$

Figure 2 represents demand and distribution dynamics under each regime when policies of labour flexibility are implemented. Such policies cause a downward shift of the cost/distribution schedule, setting off movements toward the new steady state along the demand curves from A to B. So far, the diagrams disregard international feedbacks.

In a wage-led regime $du/d\lambda > 0$. Exogenous shifts downwards of the level of labour income cause a fall of demand triggered mostly through consumption. The economy reaches a new steady state in point B, where both capacity and the wage share are lower.

In an export-led economy $du/d\lambda < 0$. The negative impact of flexibilization on the wage share, likely hitting consumption, is more than compensated by the growth of net-exports, with a net positive effect on aggregate demand. The new steady state is one of greater capacity utilization, even if the wage share is lower. Whether such an export-led case appears sufficiently realistic is, and has remained, mostly an empirical question. The extensive empirical studies by Storm and Naastepad (2012) for OECD economies, and by Galbraith (2012) for OECD and a few major developing countries, clearly suggest that export-led regimes

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20   To obtain the implied relation on u relative to λ we divide by K, replace $u = X/K$ and recall that equation (10) implies that $\pi = 1 - \lambda$.

21   We owe this observation to both Francis Cripps and Lance Taylor, commenting independently on an earlier version. The 'extreme' wage-led case described implies that $0 < \hat{\lambda}'_\lambda < du/d\lambda$. A second case of instability could arise in an assumed extreme export-led case, where , $du/d\lambda < \hat{\lambda}'_\lambda < 0$ but negatively sloped distributive curves are more rare (see footnote 13).

Figure 2: Aggregate demand and distribution in wage-led and export-led economies when global feedbacks are not yet considered
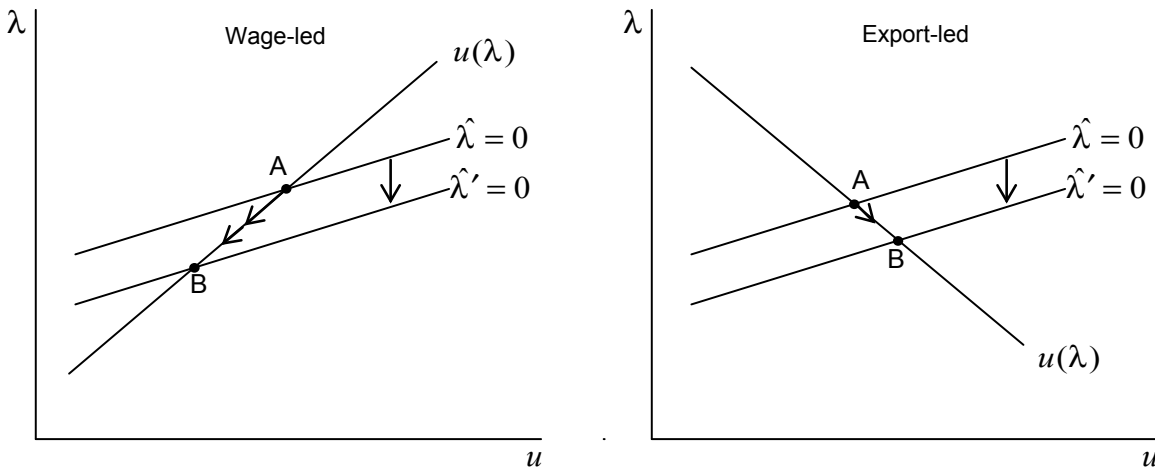
are either scant, or their successful economic performance should be explained by factors other than labour-market flexibilization, like industrial policy, infrastructure development, regional diversification, etc.

Over time, the global economy becomes wage-led

To allow tracing the effects of labour flexibilization policies in a global economy we need to impose on the macroeconomic model deployed above the critical adding up constraint. Namely, worldwide balances must sum to zero. In our two-country setting:

$$(21) \qquad \sum_i Z_i = 0 \quad \Rightarrow \quad Z_2 = -Z_1$$

Before going any further, from the typology of (stable) demand/distributive regimes proposed above, it can already be asserted that structural policies which trigger a-priori reductions in unit labour costs in wage-led economies will turn out to be contractionary. Essentially, by definition, a wage-led economy seeking competitive advantage by labour-flexibilization policies triggers a self-inflicting contraction as domestic demand falls strongly, even if an external surplus is achieved. This is a known feature and has been strongly debated by economists and policy-makers voicing opposition to structural adjustment programmes that hinged on the presumed favourable Marshall-Lerner conditions following a devaluation. Also, the net external gain of the economy that managed to reduce labour costs represents an initial loss for the trading partner. The deterioration of the trade balance due to the competitive disadvantage in the latter could be further amplified by the demand effect of the income contraction in the former. Thus, the world as a whole loses. A perhaps more interesting case could arise if, following the initial fall of external competitiveness due to cuts of labour costs in the first economy, the second economy reacts with a real appreciation.[22] If this economy is strongly wage-led, a sufficiently large move in this direction could even make up for the initial trade loss by means of a significant increase of domestic demand triggered by the rise in the wage share. However, over time this economy will build up an unsustainable external debt, the ways out of which have proved problematic. In sum, wage-led economies should refrain from seeking competitive advantages by labour-flexibilization policies in the first place.

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22   We are grateful to Lance Taylor for bringing this case to our attention.

Regarding export-led regimes, global outcomes may be ambiguous, as falls in unit labour costs would cause, by definition, a surplus that overrides the domestic demand loss caused by compression in the wage share. Thus, many economists have embarked on empirical studies which eventually find little or qualified evidence of export-led regimes.[23] In this study, we follow a different (and eventually complementary) path. Rather, we take the plausibility of export-led regimes as a given and examine their implications in a fully consistent global setting. Our central proposition can now be laid out: when feedbacks from the world economy are properly taken into account, the potential export-led benefits of increased competitiveness by lowering labour costs disappear.

The basic intuition behind our analysis can be explained recalling "the aggregation problem" raised by J. M. Keynes, Joan Robinson, Nicholas Kaldor and many others. As an economy gains an export advantage over its trading partners by lowering labour costs, the impact on the aggregate is two-fold. First, in partner countries, net income decreases following the reduction of net-exports, which leads to a fall of labour income as lower capacity utilization weakens worker's claims. Second, the contraction in losing economies spills over onto the winners. As income decreases in less competitive economies so do their imports, partially eroding the gains initially obtained through competitive advantage in "flexibilized" economies. Third, the endogenous fall of labour costs in losing economies may force greater cost reductions in the successful economy, further undermining domestic demand and exacerbating the cycle. Over time, the reduction of labour income in both economies will have an increasingly dominant effect on aggregate demand. In other words, an export-led regime will, due to its own weight and logic, become wage-led.

The limits faced by export-led regimes in a global setting emerge clearly from figure 3, representing a world economy comprised of two export-led countries. Assuming the system is initially in a steady state (A_1, A_2), we analyze what happens when country 1 introduces a policy of labour flexibilization that pushes the wage share down. Just like in figure 2, as the policy is phased in, export demand would rise, driving capacity utilization up through equation (19). Country 1 will find itself in local equilibrium in B_1, where capacity utilization is higher and unit labour costs are lower. But, unlike the single-country case of figure 2, from equation (21) it follows that country 2 experiences a fall of net exports, with the implication that capacity in country 2 would transitorily approach a point like B_2. This point denotes a steeper slope of the demand schedule in equation (19), as it now takes a larger reduction of labour costs to achieve a given increase in capacity. At (B_1, B_2), the magnitude of initial changes of output in each country depends on elasticities of savings, net-exports, investments and thus the multipliers. In general, there is no reason why total capacity utilization lost by one country should be equally gained by the other leaving global capacity unchanged. More importantly, this is not the end of the story. B_2 is not locally stable. As the institutionally determined distributive schedule in country 2 has not changed, at this point of lower capacity there are deflationary pressures following the stability condition in equation (8).

As unit labour costs fall from B_2 towards the distributive steady-state schedule of country 2, a new local equilibrium is found in C_2, implying a partial net export gain resulting from the now relatively less disadvantageous terms of trade. Correspondingly, net export losses push country 1 to C_1, with the implication that the fall in the unit labour cost of country 2 (from B_2 to C_2) causes a rotation towards a steeper

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23   See, for example, the comprehensive study by Storm and Naastepad (2012). The reader should also be aware that there remains some controversy regarding whether the United States is a profit-led or a wage-led case. As suggested to us in a comment by Matías Vernengo, the US could be a case of debt-led growth, where wage compression could still lead to increases of demand if lending rises at a faster pace. The case could be analytically incorporated in this framework by a re-arrangement of the saving (consumption) function by introducing the growth of lending, as done by Godley (1999) and successive contributions by his associates.

Figure 3: Shifting patterns of aggregate demand and distribution in export-led regimes when global feedbacks are taken into account
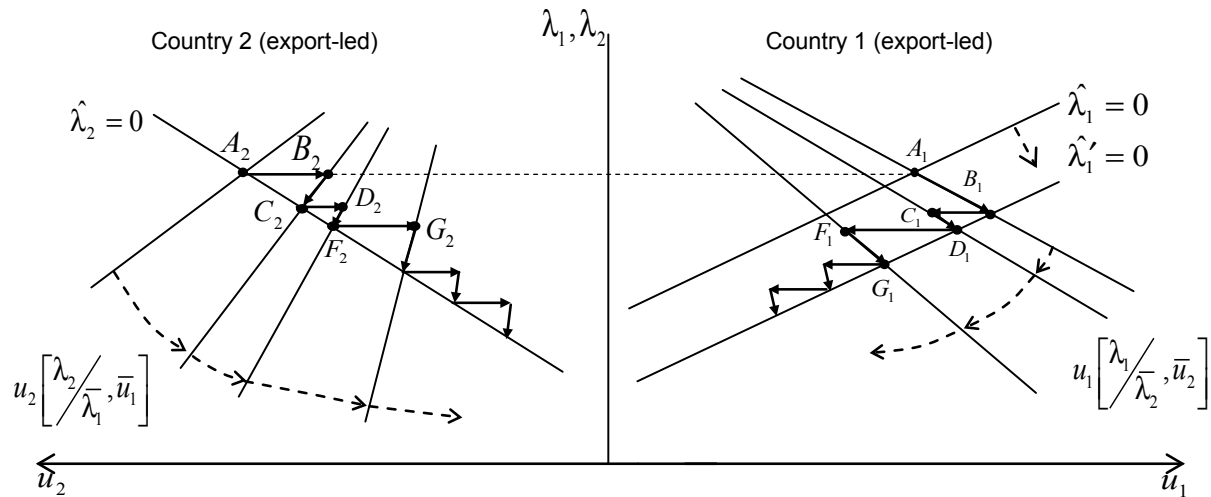

demand schedule. As C_1 is not locally stable, deflationary pressures trigger a movement along the new demand schedule towards D_1, which is, again, a situation where country 1 obtains a competitive gain *vis à vis* country 2 (which was in local equilibrium at C_2). The process continues in a downward spiral of output contraction, lower wage share and higher unemployment. There is no global steady state because successive adjustments of the same kind in each country disrupt the steady state in the other country and, in the fiscally austere conditions set out by assumption, there is no role for changes in the fiscal stance to exogenously alter the fall of aggregate demand in each country. It is worth noticing that, as these processes unfold, over time, both economies gradually become less export-led.

Would the outcome be different if the export-led country faced a wage-led rest of the world? Apparently not, as the dynamic process is entirely driven by an initial shift of the distributive schedule in country 1 and by successive shifts in the demand schedules in each country, independently of the slope of aggregate demand in country 2. Yet, the case in which country 2 is wage-led offers a more intriguing line of inquiry, sketched out in figure 4.

In terms of economic structure, the difference with the previous case is the positive slope of the aggregate demand in the wage-led economy. Assuming an exogenous increase of competitiveness in country 1, capacity utilization in country 2 decreases, as shown in the case discussed above (other things like the distributive schedule being equal). From the transitory situation (B_1,B_2), country 2 would experience deflationary pressures and the economy would be moving along a new demand schedule, made steeper by the relative depreciation of country 1, towards C_2. This situation is more contractionary *per se* than the similar transitional situation of the previous case, as the multiplier of a wage-led economy would amplify the initial shock with further losses of domestic demand even if the economy would somehow reverse the competitive devaluation of country 1. However, we could further assume that, in view of the losses experienced in country 2, there is an explicit mercantilist retaliation of a similar kind, pushing for labour market flexibilization, in a typical "race to the bottom". This new assumption intends to underscore situations which are now commonly observed: "less successful" exporters, attempting to make up for the loss of competitiveness, or forced by the circumstances, resort to lifting workers' protection, cutting minimum salaries and other

Figure 4: The case of an export-led economy attempting to obtain a net-export gain by increasing competitiveness vis-à-vis a wage-led "rest-of-the-world"
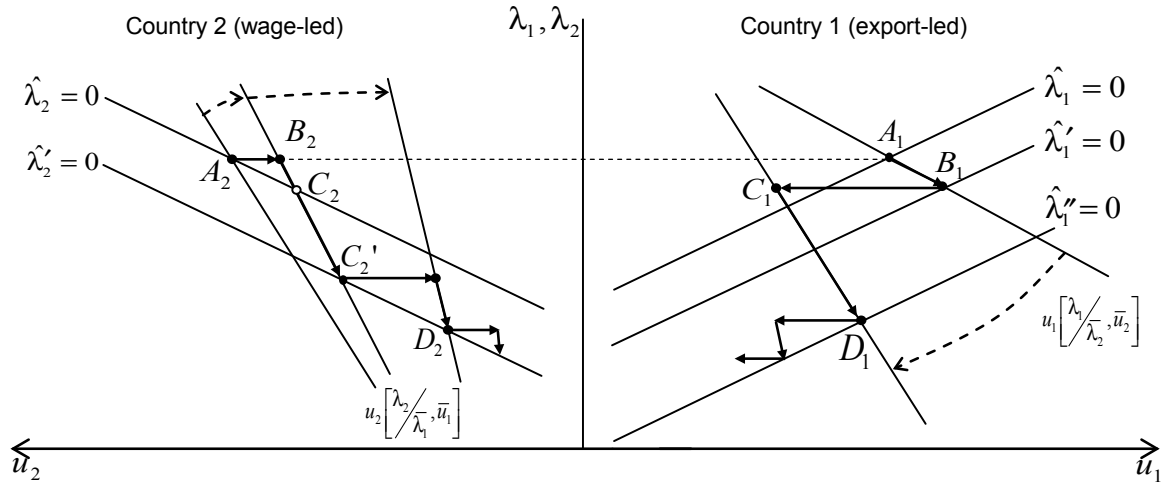
entitlements to make ends meet.[24] The assumption is represented in figure 4 by a shift downwards of the distributive schedule of country 2, which triggers a continuing movement along the demand curve from C_2 to C_2'. At this point, the loss of output is even greater and so is the decrease of the wage share in country 2, causing a significant shift of the demand schedule in country 1, towards C_1. In the process of re-establishing a new equilibrium in country 1, along a steeper demand curve and towards a new local equilibrium in $\hat{\lambda}_1' = 0$, it can be further assumed that the mercantilist responses continue and the new local equilibrium is found in D_1, on the new distributive locus $\hat{\lambda}_1'' = 0$. The result of such a race to the bottom is an accelerated recessionary spiral without end in sight as counter-cyclical fiscal policy is ruled out. Moreover, country 1 will be turning into a wage-led economy at a faster pace than in the previous case, on the back of successive mercantilist responses and the wage-led structure of country 2.

Taking these cases together, we now have a comprehensive answer to the question posed with equation (2). To recall, for labour cost cuts to successfully yield higher global employment, global output must expand, implying that growth and job creation in expanding economies must outpace contraction and labour-shredding in less competitive countries. Our conclusion is unequivocal. Under realistic assumptions on distributive and effective demand dynamics, after ruling out fiscal expansions, policies of flexibilization lead over time to a contraction of global output. Moreover, the initial gains of more competitive players are at best short-lived.

Admittedly, this conclusion is subject to caveats. First, it is an aggregate analysis and no precision about timing is provided. However, if there is no presumption of other factors intervening along the process, timing and speed of adjustment do not affect the nature of the final outcome. Regarding the level of aggregation, the decomposition proposed in equation (2) could be easily applied to a two-country world and replicated at the sector level in each country, without affecting the results significantly. After all, the fallacy of

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24　This example, in our opinion, bears a strong resemblance to the current policy scenario in Europe, where countries generally operating in "wage-led" regimes are now implementing labour reforms such as the ones indicated in the first section, aimed at catching-up with the competitive edge secured earlier by export-successful neighbours, and with no other instrument to stimulate demand in view of the synchronized fiscal austerity.

the labour flexibilization prescription manifests itself as an adding-up problem; and this should appropriately be investigated at an aggregate level. To be sure, specific national experiences of flexibilization appear successful for a while but this is likely the result of a combined set of supportive policy measures rather than wage-cutting *per se*.

Second, we did not consider the possibility that countries facing contraction of their exports could sustain demand by additional lending or asset sales. A fall of imports may not necessarily follow through as suggested above. By dis-saving or borrowing, the losing economies may momentarily avert spillovers onto their trading partners. Indeed, the lead-up to the recent global crisis showed that when an economy enjoys a privileged position in the global financial market, it can resort to this compensatory borrowing for a long time (Cripps, Izurieta, Singh, 2011). However, as debts pile up, borrowing shows its limits. Alternatively, sustaining demand by asset sales can easily become destabilizing.

Third, by the two-country world assumption we risk overlooking cases where one export-led economy is "small" and could not affect distribution in the rest of the world. But by considering such a case in isolation, we will be ignoring the fact, intrinsic to the question posed by proponents of the fallacy of the composition thesis, that in the modern world, a successful strategy devised by one country, however small, is likely to be replicated by other countries, small and large.[25] What is more, a convergence of export-led strategies by small countries is further facilitated by the relatively rapid diffusion of technical advances to small and developing economies (Patnaik, 2010).

Fourth, technical advances associated with fast industrialization could sustain successful exporters for quite a long period by ensuring accelerating net-export advantages. This question was posed analytically in Taylor (1991), empirically in Razmi and Blecker (2006), and it has often been taken up in the development literature, especially by the proponents of trade liberalization. We examine this issue in the next section.

Revisiting globally consistent distributive and demand dynamics when economies switch to increasing-returns-to-scale (IRS) technologies

Kaldor was a keen critic of the comparative advantage thesis that has dominated international trade theory since David Ricardo. In his lecture "The effects of competition" (Kaldor, 1984), he argued that "...in the absence of the assumption of constant costs …on account of increasing returns due to economies of scale the proposition [that the total volume of employment is no smaller after the opening of trade] ceases to be true" (p. 61). In the last section, we showed that seeking international competitive advantage by lowering unit labour costs may eventually lead to lower global output and employment even if manufacturing is dominated by constant returns to scale. Thus, following Kaldor's analysis, we should be more confident that the same thesis can be more easily refuted in an IRS setting. To be sure, neither Kaldor nor development economists deny the possibility that expanding to new markets by trade, with increasing returns to scale, could be growth-enhancing under certain conditions. But Kaldor's concerns are ignored by free-trade theorists, and as we will see below, by current proponents of labour-market flexibilization as a means to sustain growth. First, a concern follows from Gunnar Myrdal's principle of "circular and cumulative causation", according to which "owing to IRS in manufacturing success breeds further success, and failure begets more failure" (op. cited; p. 66). Second, Kaldor suggests that Keynes' idea that the foreign trade multiplier may push the economy

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25   We owe this observation to Jayati Ghosh's comment on an earlier version of this paper.

towards full employment was based on the assumption that "foreign trade of countries which are mainly exporters of manufactures [implying IRS technologies] is brought into balance through changes in the level of output and employment and not through changes in relative export and import prices" (op. cited p. 67).

Here, we deal with the first concern, showing that beyond the principle of cumulative causation ensuring greater *initial* gains for competitive exporters under IRS, global feedbacks may reverse these gains, thus making this worry even more pressing. In the concluding section, we will address the second concern, which puts the weight of trade rebalancing on demand policies, rather than on price-driven competitive gains.

Following Taylor (1991), we define IRS with a cost function that depends not only on variable costs (labour), but on a fixed charge as well:

$$(22) \qquad Cost = \sigma PK + wbX$$

where sPK could also be interpreted as a proxy for overhead labour costs.[26] For the IRS technology to be at least as profitable as the CRS, it has to be that $b_2 < b_1$.

As is the case in CRS, as long as production increases with higher demand (capacity utilization), the rate of profit, $r = \Pi/PK$ tends to increase:

$$(23) \qquad \Pi = PX - (\sigma PK + wbX)$$

$$(24) \qquad r = \frac{\Pi}{PK} = (1 - \omega b)u - \sigma$$

The derivation of the demand schedule follows similar lines as above, except that capacity is further influenced by the marginal cost of capital σ and unit labour costs would be now different at any given real wage $\lambda_{IRS} < \lambda_{CRS}$:[27]

$$(25) \qquad u = \frac{g_0 + s\sigma + \xi|\lambda_{IRS}}{s(1 - \lambda_{IRS}) - \beta}$$

Following these changes, in an export-led regime the slope of the demand curve is flatter, meaning that the economy is more strongly export-led after the adoption of IRS technologies (see figure 5).

Assuming technology is readily available in a globalized production structure (Patnaik, 2007), entrepreneurs whose firms currently operate under CRS will adopt IRS technology if the profit rate associated with it is at least as high as that associated with CRS:[28]

$$(26) \qquad r_{IRS} = (1 - \omega b_{IRS})u_{IRS} - \sigma \ \geq \ (1 - \omega b_{CRS})u_{CRS} = r_{CRS}$$

Thus, IRS is viable if the real wage, the rate of capacity utilization, or both, are high enough. Graphically, viable options are located above a hyperbola defined in the (u, ω) plane:
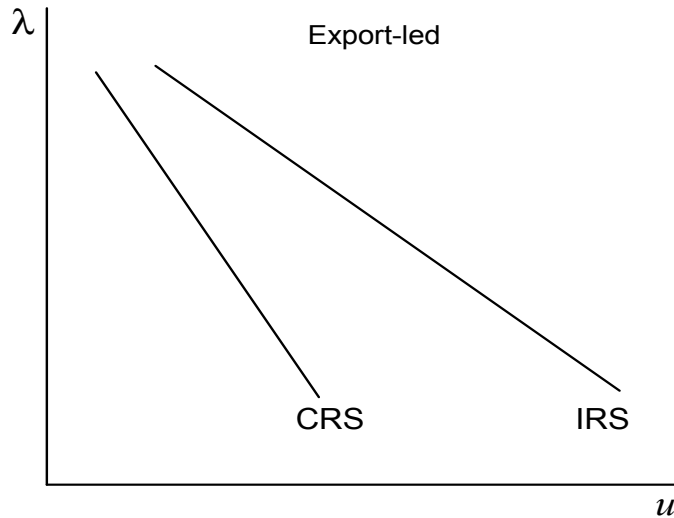
$$(27) \qquad \omega u \ \geq \ \frac{\sigma}{b_{CRS} - b_{IRS}}$$

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26   As shown in Lavoie (1992), using a slightly different formulation.

27   Without loss of generality, we disregard savings out of wages.

28   In what follows, we exclude the possibility of re-switching, considered impracticable by most development economists.

Figure 5: Slope of the demand curve in an IRS export-led regime becomes flatter

We can now assess the implications of labour flexibilization policies. Assuming the economies are export-led, we look at the effects when one country switches to new IRS technologies.

In Figure 6, we assume, as noted above, an initial steady state in (A1, A2), where both economies operate with CRS technologies. We can postulate that mercantilist policies leading to reductions in unit labour costs in country 1 could trigger a sufficiently large increase in capacity utilization to make IRS technology viable, according to equation (26). In this case, the economy will not reside in the local equilibrium B_1, but in B_1', as the demand schedule shifts outwards and becomes flatter. The improvement to this point

Figure 6: Dynamics of output and distribution when an export-led economy seeks competitive gains by wage-cutting and adoption of IRS technologies
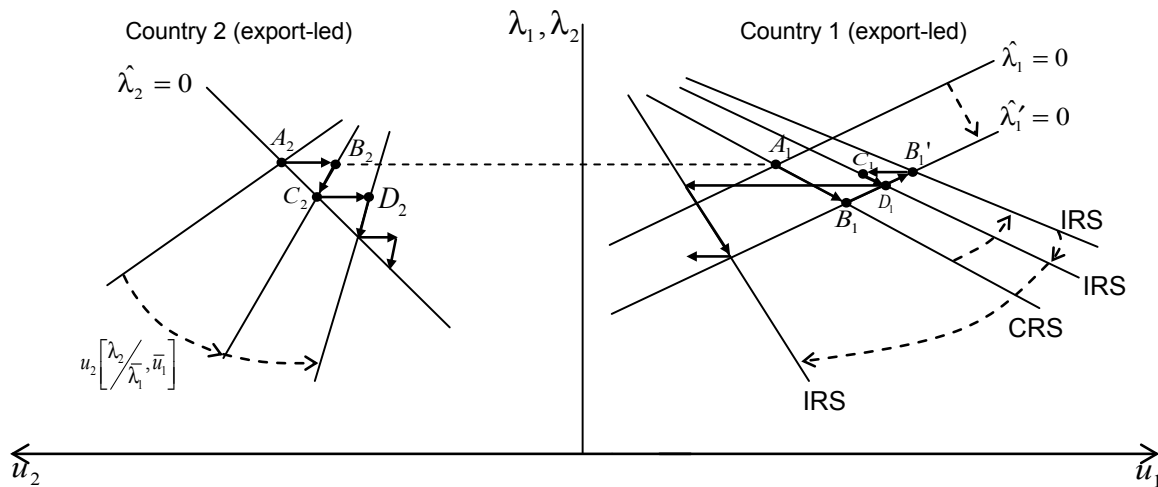
corroborates the "cumulative causation" principle, manifested by the synergies between productivity gains (lower unit labour costs), new investments, and export competitiveness. However, in a global system, even such "success" is ephemeral. As in previous cases, falling net exports and further multiplier rounds in country 2 cause a steepening of aggregate demand and movements to B_2 and subsequently C_2. As country 1 now faces lower unit labour costs of country 2, competitive gains slowly fade away, causing an exogenous rotation inwards of the IRS-demand schedule of country 1. From C_1, this economy will find a new local steady state in D_1, along the new demand locus. By achieving a relative competitive gain *vis à vis* country 2, a new trade shock in the latter causes further losses of capacity and reductions of unit labour costs that feed into each other. The process points to a global contraction and, lacking countercyclical fiscal policy, there is no way to halt the downward spiral. Moreover, as this unfolds, country 1 reaches a point where IRS technology is no longer viable even though it is already installed. With no re-switching possible, initial success, after some time, begets failure.

Concluding remarks:
Employment generation by internationally coordinated demand policies

In this paper, we proposed an analytical representation of a common concern among the pioneers of development economics, corroborating from this methodological standpoint the various empirical findings cited above. Our central conclusion is that pursuing labour market flexibilization with the aim of increasing employment via export-driven growth is bound to fail, especially if fiscal austerity prevents government spending from picking up the slack in global demand to contain a downwards contractionary spiral.

In wage-led regimes, the policy is contractionary in the first round, as the fall of consumption generated by lower wages is larger than the expected export gains. In profit-led regimes, the policy is also bound to fail; despite initial positive effects, the contraction of income and employment in trading partners spills over into the economy seeking competitiveness gains. Finally, we argued that flexibilization is contractionary, even in countries capable of switching to IRS technologies. Despite the fact that their initial gains might be larger than otherwise, and thus the reversal to lower capacity and wage income relatively slower, global demand feedbacks will become binding, and contractionary processes will unravel in similar ways. Moreover, in this case, the successful exporting economy might also bear the cost of installed technology that is no longer economically viable.

To all these scenarios, it should be added that, if countries engage in competitive flexibilization of their respective labour markets, the contractionary effects of such a race to the bottom are exacerbated. In practice, the strength of the spillovers varies from country to country, depending on employment levels, endowments of fixed capital, ability to incorporate new technologies, market structure, and, most importantly, the willingness of policymakers to engage in competitive flexibilization. Over time, however, the a contraction is inevitable.

As we write, a confluence of policy factors threatens recovery from the financial crisis, already facing well-known challenges of persistent debt distress and wealth deterioration in major economies. On the one hand, the sharp reversals of fiscal stance in many of these countries lead to mass lay-offs and large multiplicative effects across countries. On the other hand, pressure towards flexibilization of labour markets, aimed at boosting export-driven growth, leads to lower consumption, net exports and employment.

A policy alternative implied in the analysis presented above harks back to Keynes and some of his contemporaries, as several studies have recently emphasized (Davidson, 2002; Palley, 2012; Taylor, 2010; UNCTAD, 2012, 2010; UN DESA 2012, 2011). While Keynes criticized the attempt to gain trade advantages under mercantilism as "immoderate" and "senseless", as it "is liable to involve an equal disadvantage to some other country" and "which injures all alike" (*General Theory*, pp. 338-339), he advocated a combination of expansionary monetary policy and "of a national investment programme directed to an optimal level of domestic employment which is twice blessed in the sense that it helps ourselves and our neighbours at the same time" (p. 349). Furthermore, in his Bretton Woods proposal for an International Credit Union, Keynes stressed that the responsibility of resolving external imbalances rests mainly on surplus countries. Indeed, these should expand domestic demand, a task that can be more easily accomplished by policymakers than the compression of domestic demand and expansion of supply required in debtor countries. (see, for example, Perez-Caldentey and Vernengo, 2012).

This policy alternative can be easily traced in our diagrams (combinations of public and private investment typical of industrial policy, as well as income policies shifting the demand curves outwards). International policy coordination is particularly important to start a sustainable path of recovery, but it inevitably entails domestic policy efforts towards a "more balanced pattern of domestic demand" as well as "rising wages", accompanied by "appropriate social protection measures [to] provide worker security" as the basis for a "fairer world", as put forward by Vos (2010, p. 143). After policymakers' failure by omission in the lead-up to the crisis, an ensuing failure by policies that seek austerity and wage-cost repression is an imprudence the world cannot afford.

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