Reassessing Marshall's Producers' Surplus: a Case for Protectionism

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Abstract

The rationale for liberal economic policies refers *inter alia* to the so-called producer and consumer surpluses, namely welfare concepts which were proposed by Alfred Marshall in his seminal work *Principles of Economics*, first published in 1890. In the case of trade policy, relying on surpluses and referring to the 'small country case', it is recommended to remove tariff barriers imposed on the imports of commodities because it should increase welfare and, in theory at least, the losers of such a trade policy orientation can be compensated with the use of adequate transfers from winners.

Despite extensive use, the concept of surpluses still raises key questions that may alter the case for free trade. Thus, from a purely semantic perspective, the concept of producer, as presented in Marshall's work, seems to be broader than the concept which is proposed in the dominant economic discourse; in other words, workers should also be seen as producers.

Assuming that the workers are considered as producers, their wage rents must be taken into account when discussing the impacts of trade liberalisation; in addition, the welfare costs of unemployment caused by the opening of national economies should be included – as a result, the case for free trade weakens considerably, it could even vanish.

Keywords: Alfred Marshall, trade liberalisation, producer surplus, wages, unemployment, ethics.

Introduction

Trade liberalisation remains a high priority on the agenda of most Western leaders, especially in the EU. Such a strategic policy option is supported by negotiations taking place at different levels: bilaterally, i.e. between countries, in the context of regional economic integration agreements, and within the framework of the World Trade Organisation (WTO). Overall, more than 500 free trade agreements have been notified to the General Agreement on Tariffs and Trade (GATT) / WTO and most of them are being implemented.

The rationale for liberal economic policies refers *inter alia* to the so-called producer and consumer surpluses, namely the welfare concepts that were proposed by Alfred Marshall in his seminal work *Principles of Economics*, first published in 1890. Thus, in the case of trade policy, relying on surpluses and referring to the 'small country case', it is recommended to remove tariff barriers imposed on the imports of commodities because it should increase welfare and, in theory at least, the losers of such a trade policy orientation can be compensated with the use of adequate transfers from winners.

Despite extensive use, the concepts of surpluses still raise key questions that may alter the case for free trade:

(i) In his *Principles*, Marshall draws a line between two supply curves, one for output expansion and one for output contraction, with two different elasticities. Such a distinction is not taken into account when discussing the welfare impacts on producers of trade liberalization – referring to them would reduce the benefits of free trade.

(ii) From a purely semantic perspective, the concept of producer, as presented in Marshall's work, seems to be broader than that which is proposed in the dominant economic discourse; in other words, workers should be seen as producers.

(iii) Assuming workers are fully considered as producers, at least their wage rents should also be taken into account when discussing the impacts of trade liberalisation.

(iv) Considering the unemployed, wage losses may not fully reflect the decline of welfare created *inter alia* by the loss of jobs, which means that the welfare consequences of liberalisation may go beyond the loss of income and rents.

These issues are presented and discussed in this paper.

In particular, following a short overview of free trade agreements and ongoing trade negotiations (section 1), the traditional case for trade liberalisation is presented in section 2. The importance of the traditional case is underlined referring to WITS (World Integrated Trade Solutions), namely a trade liberalisation simulation tool proposed on the website of the World Bank (section 3). The two Marshallian supply curves are considered, as well as their implications for the assessment of the welfare impacts of trade liberalisation (section 4). Following the work of Marshall, the workers, fully recognised as producers, with their wages and corresponding surpluses, must be added to the welfare analytical framework. Combining profits and wages losses means that value-added changes are taken into account; such a perspective, more in line with Marshall's theory, leads to new conclusions about the welfare impacts of trade liberalisation – eventually, it would not support trade liberalisation and could even justify protectionism (section 5).

Referring to trade liberalisation, evidence about wages and the cost of unemployment for the unemployed in leading economies, is provided in section 6. Reported facts underline the need to move welfare analysis beyond the traditional surpluses and rents when discussing the impact of free trade agreements and, subsequently, consider a paradigm that would include, for instance, Sen's capabilities approach (section 7).

1.   Free Trade Agreements in the Global Economy

Free Trade Agreements (FTAs) are nothing new. One of the first, well-known FTAs is the so-called 'Cobden-Chevalier Treaty' which was concluded between the UK and France in 1860 – it was initiated by Cobden to consolidate peaceful relations between the two former belligerents and, as a result, remove the threat of a French invasion of the UK. Considering regional trade agreements, the German 1834 *Zollverein* (customs union) is the traditional historical reference; it was also perceived as a major step toward the 1871 German unification and, moreover, it is often associated with the academic work of the German-American economist Friedrich List (1789-1846), who advocated protectionism to support the development of 'infant industries' – by adopting such a policy, Germany would become one of the leading industrial powers before WWI, alongside the UK and the US.

Considering the post-WWII period, overall, 124 FTAs have been notified to GATT between 1948 and 1995. Since the creation of the WTO in 1995, more than 400 agreements were added.

More recently, efforts are being made to merge progressively bilateral FTAs and replace them by regional trade agreements. Such important moves include negotiations for a Trans-Pacific Partnership (TPP) Agreement between ASEAN countries and six other WTO members, and the decision to achieve the African Tripartite Agreement between three regions

(Common Market for Eastern and Southern Africa (COMESA), East African Community (EAC) and Southern African Development Community (SADC)).

FTAs first concentrated on trade in goods, in particular non-agricultural ones. Following the creation of WTO, with the conclusion of the Uruguay Round, trade in services and non-tariff barriers (which include *inter alia* technical standards, sanitary and pythosanitary measures, customs procedures and formalities and international payments regulations) are now being addressed. For Non-Tariff Barriers (NTBs), there are also attempts to measure tariff equivalents with CGEMs (Computable General Equilibrium Models).

In other words, the number and the coverage of FTAs have increased during the last two to three decades – as a result, the average rate of protection for the world is presently very low (see graph 1).

**Graph 1** Average nominal rate of protection for the world
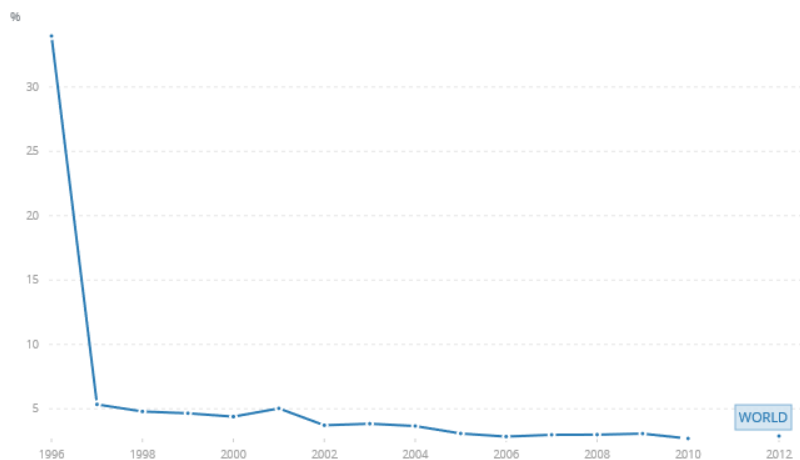
Source: World Integrated Trade Solution (WITS) the World Bank website.

2. Trade Liberalisation and Welfare: the Dominant Paradigm

In addition to Ricardo's law of comparative advantage, several frameworks have been proposed to justify free trade. In that respect, one of the most popular tools for the study of the economic, trade and welfare impacts of trade liberalisation is based on 'partial equilibrium comparative static analysis'. The partial equilibrium perspective considers only the effects of a given policy action – e.g. the removal of an import duty – in the market directly affected. It does not take into account the interactions between the various markets in a given economy. One of the advantages of such an approach is that it mainly refers to the concept of rent or surplus, in monetary terms, for both producers and consumers. In addition, this approach avoids an aggregation bias corresponding to situations where tariff removal would create nonexistent welfare benefits because of not taking into account the conditions related to single products (for more details, see Amjadi et al., 2011).

Figure 1: Welfare impact of trade liberalization – the traditional producer surplus versus value-added
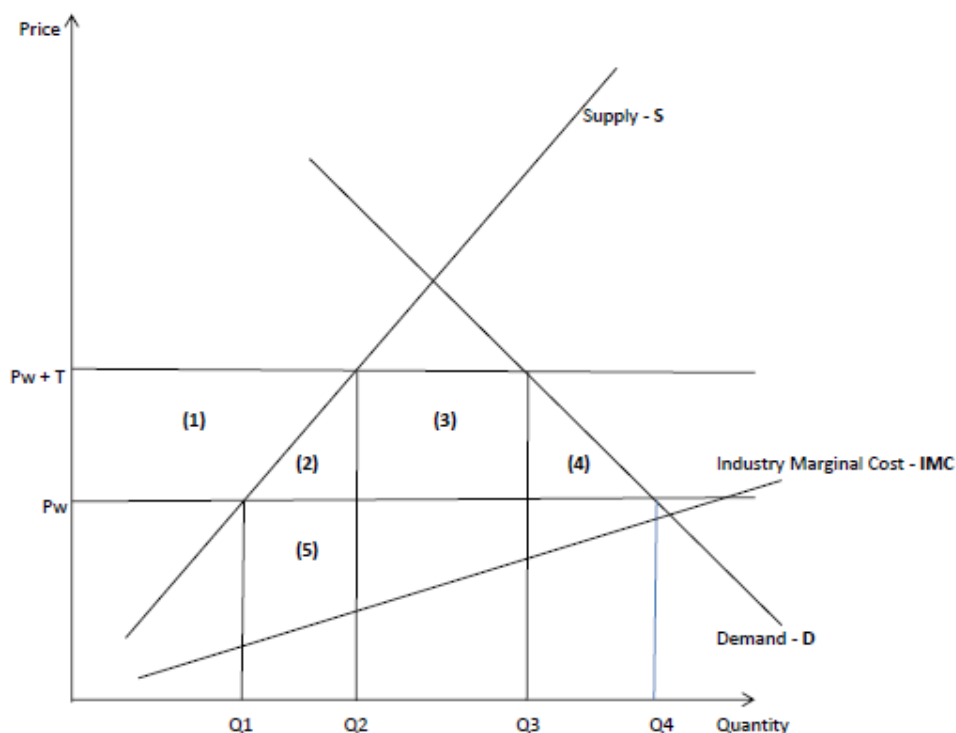
Referring to figure 1, presenting the small country case, seen as a price-taker on world markets, the removal of a tariff T imposed on an imported good lowers its price on the domestic market from (Pw + T) to Pw. As a result of tariff removal, domestic production falls from Q2 to Q1, and consumption increases from Q3 to Q4. In terms of welfare, the so-called producers lose profits or area (1), because of the lower price and reduced sales. The state loses all its revenue measured by the area (3). Consumers or buyers gain [(1) + (2) + (3) + (4)]. In total, there is a net welfare gain for the small importing country equal to the sum of the traditional welfare triangles (2) and (4), with area (2) categorised as a production gain from the (presumed) better reallocation or redeployment of resources elsewhere in the domestic economy, while area (4) is the consumer gain caused by the expansion of the market, as a result of the lower price. Under 'normal conditions', [(2) + (4)] is always a positive value, which means the outcome of the proposed standard analysis justifies the removal of the import duty or the full and unequivocal adoption of free trade. The same analysis can also be used to justify the complete removal of export subsidies, with fiscal and consumer gains outweighing producer loss.

Historical perspective

The standard or textbook economic and welfare analysis of trade liberalisation is the outcome of specific interpretations of Marshall's work. Thus, two of Marshall's successors initiated the analysis presented in this section: Henry Cunynghame, who studied with Marshall, is credited with applying the Marshallian curves to assess the impact of liberalisation on a single market, for two open countries trading together and using import and export taxes (Murphy, 2017). In an article published in 1908, Enrico Barone – a prolific neoclassical and mathematical economist (seen as the father of scientific socialism), and military historian – derived the familiar welfare conclusions, without referring to the workers (Heal, 1976; McLure, 2006).

Marshall applied his analysis to trade policy, using consumer and producer surpluses; however, this work was not published at the time (Whitaker, 1975).

3. WITS and the free trade bias

Relying on the traditional welfare paradigm, as presented in the previous section, World Integrated Trade Solution (WITS), is an on-line tool developed jointly by four organisations, namely United Nations Conference on Trade and Development (UNCTAD), United Nations Statistical Office (UNSO), WTO and the World Bank. It can be used free-of-charge for estimating *ex ante* impacts of the removal of import duties. These impacts relate to trade diversion and creation, price, tariff revenue, consumer surplus and welfare changes.

Surprisingly, WITS says little or virtually nothing about domestic supply conditions. The exclusion of producers could reflect a pro-free trade bias and express the liberalisation agenda of the organisations involved in the development of WITS – this seems obvious for WTO and the World Bank.

4. Non Unique Supply Curves and the Producer's Loss of Welfare
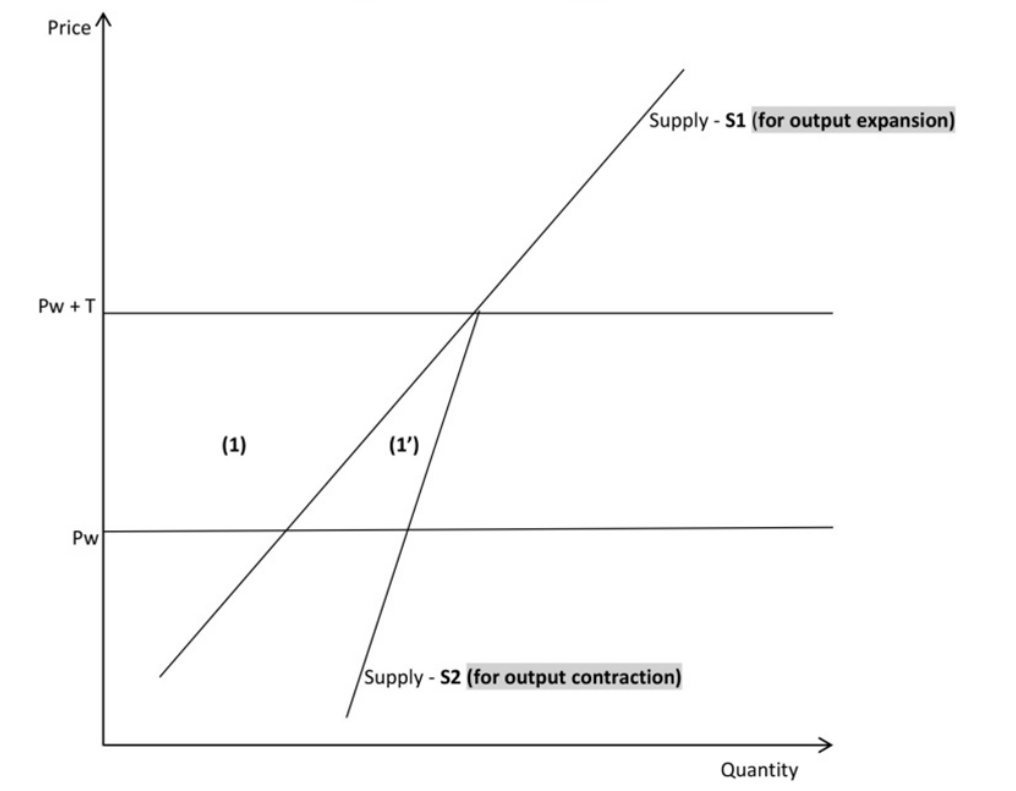

Figure 2: Marshall' supply curves

Figure 2, reflecting Marshall's views, as they are presented in Appendix H of the *Principles*, and limited to the domestic supply side, shows two supply curves. S1 corresponds to output expansion, created by a price increase. S2 is the supply curve corresponding to a price decline, following, for instance, the removal of an import duty – it has a smaller price-elasticity than S1. The difference between the price-elasticities of S1 and S2 can be explained by the

fact that the economies that were associated with organising higher output levels are not totally lost when output levels contract, because of the fall in price paid to the producers; in other words, the new supply curve will reflect the improvements in production conditions achieved during previous periods (for instance, with the adoption of so-called 'lean production' methods that were introduced by Japanese firms, Toyota in particular) and, as a result, limit the fall in output when the price decreases.

The welfare implication of such a distinction between the two supply curves is straightforward: with S2, the loss of welfare corresponds to [(1) + (1')], which is larger than (1) – reflecting the lower price-elasticity of S2. In other words, by introducing S2, the costs of trade liberalisation for the producers are larger than the traditional one, as reported in figure 1. It also means that the case for trade liberalisation is somehow softened. However, when adding the demand side and the state, in terms of welfare, the overall impact remains positive, which still supports a liberal orientation for the trade policy regime.

5. The Workers Seen as Producers and Corresponding Welfare Implication

Considering producers *per se*, in his *Principles of Economics*, Marshall mentions both 'producers' and the workers, who are seen as: (i) direct producers, with their wages, and (ii) indirect producers, or owners of capital.

> 'While national income or dividend is completely absorbed in remunerating the owner of each agent of production at its marginal rate, it yet generally yields him a surplus which has two distinct, though not independent sides. It yields to him, as consumer, a surplus consisting of the excess of the total utility to him of the commodity over the real value to him of what he paid for it…
>
> Another side of the surplus which a man derives from his surroundings is better seen when he is regarded as producer, whether by direct labour, or by the accumulated, that is acquired and saved, material resources in his possession.
>
> As a worker, he derives a worker's surplus, through being remunerated for all his work at the same rate as for that last part, which he is only just willing to render for its reward; though much of the work may have given him positive pleasure.
>
> As capitalist (or… as owner of accumulated wealth in any form) he derives a saver's surplus through being remunerated for all his saving…'
> (Marshall, 1920, Appendix K, p. 494)

In other words*, stricto sensu*, workers' surpluses would first correspond to pleasure given by work and their remuneration. Overall, and despite some semantic 'issues' related to the complexity of Marshall's analysis, when considering his work, wages should include a category of surplus reflecting the importance of workers as producers – which is what they are, in fact.

The Case for Protectionism

Wages are now added to profit when analysing the welfare impacts of the removal of import duties. In other words, the wage element must be removed from the supply curve S, and what

remain are the industry marginal costs – or IMC in figure 1 – related to various inputs, not the factors of production, which does not prevent suppliers from continuing their quest for a maximum profit along the supply curve S (for the sake of simplicity, there are no separate supply curves, as presented in section 4).

Again, the full elimination of the import duty affects firms' profits, state revenues and consumers' welfare – the sum of all impacts corresponds to the traditional welfare triangles, (2) and (4) in figure 1.

Referring to workers, the loss of wages corresponds to the difference between the supply curve and the industry marginal cost curve, IMC, related to the use of inputs. Thus, the wage change caused by the reduction of production from Q2 to Q1 corresponds to [(2) + (5)], a result which raises questions:

- What is the corresponding loss of welfare?
- Should 'all-of-wages' be taken into account, or just corresponding rents, referring to labour supply conditions?

There is no straight answer to these questions.

Considering wage rents, *a priori* no one knows where the workers affected by liberalisation come from, i.e. to what segments of the labour supply they can be associated with, and what are the corresponding rents. However, it can be assumed that these rents are positive values, which means that the workers' rent-based loss of welfare represents a non-zero fraction of [(2)+(5)]; more formally, the workers' loss of welfare equals: {α [(2) + (5)]}, with '0 < α < 1'.

When adding wage rents, the total welfare change caused by the elimination of an import duty is: {(2) + (4) - α [(2) + (5)]}, which can be positive, zero or negative, depending on the actual value of α, an unknown parameter. If all 'all-of-wages' could be seen as rents (in which case α = 1 – an extreme and 'absurd' case, perhaps), the total welfare change would correspond to [(4)-(5)], with a corresponding cost for producers that is equal to the value-added change. In other words, the (lower) greater is α, the (greater) lower is the case for free trade.

Moreover, workers could also lose their jobs and stay unemployed for long periods of time – and some of them without unemployment benefits. Such desperate situations, which go far beyond 'partial equilibrium comparative static analysis', imply that welfare losses could be much larger than wage rents, and for some workers they could correspond to 'all-of-wages', even more, etc.

To conclude, by adding wage rents and the (un)employment status of the workers to the welfare analysis of the impacts of trade liberalisation, the case for free trade weakens, and there could eventually be a relevant argument for protectionism. In fact, from a theoretical perspective, there seems to be no 'magic' formulae or combination of geometric shapes (triangles and more complex ones) to evaluate the final welfare change and allow for a firm and final decision about the implications of the trade policy regime.

6. Evidence About Wages and Unemployment

The relationship between trade and wages is a complex one. It seems that past studies are not fully conclusive. Nevertheless, in this section we report evidence about wage dynamics in developed countries. Trends are definitely worrying and, to some extent, they can be related to the on-going globalisation process. Also, considering the evidence from the US and other

advanced countries, for the first time after WWII, the younger generations might be confronted with declining living standards in the long run. In addition, in most Western countries, there are increasing inequalities, which undermines social consensus and stimulates the rise of populism and xenophobia.

After WWII, real wages in US manufacturing grew in line with productivity for about three decades, including the 'golden sixties'. After the first oil shock in 1973, wage dynamics started being disconnected from productivity growth. Thus, according to Bivens and Mishel (2015), net productivity grew by 1.33% percent each year between 1973 and 2014, which is significantly above the annual low 0.20% change for the median hourly compensation (see table 1 for more details).

Table 1 Median hourly compensation and productivity growth in the US, 1973–2014 (Yearly change, %)

Reference variables	1973–2014	2000-2014	2007-2014
Median hourly wage	0.09	0.03	-0.30
Median hourly compensation	0.20	0.13	-0.30
Net productivity	1.33	1.41	0.91
Net productivity–median compensation gap	1.13	1.28	1.22

Source: J. Bivens and L. Mishel (2015), page 8.

The large discrepancy between most wages and productivity corresponds to growing inequalities among workers and between social classes – with a large share of productivity gains going straight 'in the pockets of extraordinarily highly paid managers and owners of capital' (Bivens and Mishel, 2015, p. 23), which could reflect a dramatic shift of bargaining power between workers and their representatives, namely the trade unions, and the ruling elites, and institutional changes on labour markets.

In addition, linkages are made with international trade and the new global economy to explain wage dynamics and inequalities. In the 1960s, US manufacturing was first confronted with growing competition from Japan and European economies. In more recent years, the rise of China as a major producer and key-exporter, and the threat of offshoring production are perceived as factors to explain the significant decline of manufacturing and the pressuring of wages in the US (Levy and Kochan, 2012). Considering services – progress with computers, telecoms, and data gathering and processing – also allows profitable offshoring investments and operations in low-wage countries such as India.

A similar phenomenon is observed in Germany, the leading and largest economy in the EU. Despite higher education levels, German employees have been confronted with stagnant or declining wages since the 1990s. As a result, the share of wages in national income reached a 'historical low' in 2007 and 2008, at 61% (Brenke, 2009). Furthermore, for the most recent years, favourable labour market conditions, with a comparatively low unemployment rate in the EU context, did not help improve workers earnings (DIW Berlin, 2015).

In Japan, for both men and women, real wages increased during the 1990s. During the 2000s, real wages started declining, especially for the 'middle wage workers' (Yokoyama et al., 2016). The UK displays similar features (Bell, 2015).

As mentioned, the reported changes and tendencies can be attributed to several factors, in particular the opening of national economies, with the lowering of trade barriers, for

both goods and services. After years of negotiation, China became also a WTO member in 2001, which means it benefits from the Most-Favoured-Nation (MFN) status in terms of market access and national treatment, contributing to more competition in the global economy and the subsequent decline of Western industries. Moreover, China is involved in trade disputes against Western countries, rendering much more difficult the protection of companies and workers in these countries. Such hard facts underline that the social implications of trade liberalisation can hardly be predicted with the traditional welfare approach relying on Marshallian triangles only and require a broader paradigm to be more conclusive about the linkages between trade and the well-being of people.

In addition to flat real incomes, some countries are enduring high levels of unemployment, which can also be related to trade and may result in high costs, especially for the unemployed.

Assessing the welfare costs of unemployment is a difficult exercise, which must take into account various factors such as the actual loss of income and the worsening of self-esteem, other psychological dimensions, health conditions, and in some cases the voluntary termination of life – or suicide.

Relying on Milton Friedman's permanent income hypothesis and data provided by the German Socio-Economic Panel on the former territories of East Germany over the period 1992-2005, Knabe and Räetzel (2007) conclude that the non-pecuniary costs of unemployment can amount to 2.3 times the loss of income.

Considering mental health *per se*, several studies underline the negative impact of unemployment on the psychological balance of the unemployed, especially in the 30 to 50 or 55 age range. Males are also seen as more vulnerable than females (IWH, 2009). Unemployment may lead to schizophrenia and hospitalisation. The impact of unemployment on physical health is another field of investigation; there is an interface between mental and physical health – with unemployment, stress increases considerably and poor diets prevail, contributing *inter alia* to heart disease; moreover, being unemployed may delay the use of health care because of pecuniary considerations and lead to risk-taking behaviour. The unemployed may also end up living on the street, become homeless and lose any positive status in the society. Such living conditions may imply that the unemployed are no longer part of the labour force, there could be no more job search activity and survival depends on the generosity of others; life expectancy is also shortened (NCH, 2007).

The worst possible cost of unemployment, related to marginalisation and extreme despair, is suicide:

> 'In June 2009, Christelle Pardo, pregnant and with her five-month-old baby in her arms, jumped to her death from the balcony of her sister's flat in Hackney.
>
> Her Jobseeker's Allowance had been stopped because of her pregnancy and this meant that she also lost her Housing Benefit: the local authority was demanding that she return £200 in overpaid HB. She had been turned down for other benefits – her appeals had been turned down twice; her last call (for help) … was made just the day before her suicide' (TUC, 2010, p.1).

With adequate support, the Christelle Pardo case could have ended differently – her fate is not an exception also. Quantitative studies do show that, on average, one in five suicides is associated with unemployment (University of Zurich, 2015). In Japan, recession led to a sharp increase in the total number of suicides, about 30,000 in excess for more than ten years after

1998. These changes are supported by regression analysis; thus, referring to two models (see table 2), when unemployment increases, the number of suicides increases (Chen et al., 2012, p. 85).

Table 2 Regression analysis – suicides and unemployment rates in Japan using quarterly panel data

Dependent variable: Number of male suicide victims per 1000 Reference period: 1991 QI-2005 QII		
Variables	**Model 1**	**Model 2**
Unemployment rate	0.424*** (0.106)	0.354*** (0.106)
Number of bankruptcies	--	0.072*** (0.023)
Constant	0.012*** (0.004)	0.008** (0.004)
Number of observations	376	376
R-squared	0.083	0.111
Notes: - Between parentheses, standard errors; - *** (**) means 1% (5%) significance level.		

Source: J. Chen and al. (2012), p. 85.

Since 2008, Greece has been confronted with a sharp economic and financial crisis and 40% of the households now have at least one member who is unemployed; moreover, youth unemployment is more than 60%. Here also, the impact of socio-economic conditions on suicide is significant; in addition, the use of antidepressants and the number of divorces and HIV cases are increasing (Madianos et al., 2015).

The welfare costs of unemployment can reach very high levels indeed, especially for unemployed people and their relatives and families, which underlines the need to add dimensions beyond the traditional welfare triangles, the wages and their rents, to analyse the consequence of trade policies.

7. Moving Welfare Analysis Beyond Rents

Considering issues like mental and physical health, homelessness, and life expectancy, including suicide – because of despair, seems to correspond to paradigms developed, among others, by Sen, Rawls and Nozick. According to Sen, it is most surprising that welfare economics has been unable to integrate such dimensions that are very common in development economics:

> 'One of the extraordinary features of standard welfare economics has been the neglect of information about health, morbidity and longevity. Though these variables have often been taken seriously in the development literature ..., they have typically been ignored in welfare-economic treatises' (Sen, quoted in Atkinson, 1998, p. 8).

Sen proposes an approach based on capabilities to go beyond what he calls 'welfarism' – capabilities refer to the scope of the choice an individual has to function normally. They also

relate to the possibility a person has to achieve his/her potential, his/her 'dreams' perhaps. After being turned down for social benefits, it seems that Mrs Pardo was no longer in a position to live normally.

Rawls focuses on the worst positions in society, which should determine public choice – a 'max-min perspective'. Such extreme positions relate first to the access to primary goods, defined as 'things that every rational man is presumed to want' (Atkinson, 1998, p. 8). Again, Mrs Pardo and her little child seemed to be in one of the worst possible situations.

Nozick's perspective is different. Amongst other things, he considers the way income distribution has been 'brought about' (Atkinson, 1998, p. 8) – to what extent it is legitimate. Such an approach may help clarify the evolution of income distribution in many countries over the last two or three decades; in that respect, the growing discrepancy between productivity and wages, with fast growing bonuses for the 'principals' (owners) and their 'agents' (managers), is worth analysing – in addition to the growing pressures from trade.

These paradigms may suggest new approaches to analyse the impacts of trade liberalisation policies, moving above and beyond the traditional welfare triangles and wage losses. It implies that social sciences must merge their views when studying the consequences of policy choice on the lives of individuals and connections within societies. Such a vision requires a certain emphasis on altruistic thinking and values – for complementing and countering egoistic perspectives found in conventional economics textbooks.

Final remarks

I)   Marshall's traditional welfare triangles are widely used in academia and economic policy circles to justify the removal of import duties, and to analyse other policy measures such as, for instance, the use and the elimination of production and export subsidies.

II) Referring to a new understanding of the *Principles*, the traditional or textbook interpretation of Marshall's work is questionable.

III) Considering Marshall' seminal work, there is a distinction between two supply curves, one for output expansion (S1), and one for output contraction (S2) which has a lower price-elasticity than S1; the output contraction curve should be used for assessing welfare changes caused by the removal of an import duty and the subsequent lowering of the price, which implies a higher loss of surplus for the producers/firms and, as a result, it weakens the standard case for free trade.

IV) Workers are not taken into account in the traditional welfare analysis, which refers only to firms, consumers and the state. The exclusion of workers can be related to Barone's 1908 welfare paradigm developed for the analysis of international trade, namely a rather specific interpretation of Marshall's concepts of surpluses and rents.

V)   A candid reading of Marshall's work helps identify workers as producers, with their own surplus and/or rents.

VI) When adding workers and their surpluses to the traditional welfare analysis, the case for free trade may just vanish because the welfare impact of the removal of an import duty can be negative – an impossible outcome with the so-called traditional welfare triangles.

VII) In addition, even if the wage-related rent is totally unknown, for most workers, it can be assumed that losing a job and being unemployed has serious welfare consequences. For instance, in the case of long-term unemployment and no unemployment benefit, the loss of welfare should perhaps be measured by *at least* the loss of income.

VIII) The last argument would imply that welfare analysis should move beyond rents and explicitly take into account, for instance, Sen's capabilities related to incomes and wealth. According to Sen, such a move overtakes the so-called traditional 'welfarism'.

IX) Considering the evidence, for the US, Germany and Japan at least, wages have – at most – remained flat for decades, a phenomenon that may have been partly induced by the further opening of their economies and the rise of China as a major trading nation, following its accession to the WTO. In addition, in some countries, unemployment can reach a high level, which may be related to trade and has negative welfare implications.

In conclusion, Marshall's concepts should definitely be reconsidered to better assess the economic and welfare consequences of economic policies, in particular existing and future trade agreements. Furthermore, as policy-related welfare analyses should move beyond rents, it could imply 'breaking the wall' between key academic disciplines, combining at least economics, medicine and psychology (for health and behavioural issues), and philosophy, with a reference to the concepts and the ethical perspectives proposed by Sen and others.

Acknowledgements

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