

# **WORKING PAPERS**

## **FIVE METHODOLOGICAL APPROACHES FOR RESEARCH ON GENDER AND TRADE IMPACTS**

Irene van Staveren

November 2005

Working Paper Series No. 417



Institute of Social Studies

**FIVE METHODOLOGICAL APPROACHES FOR RESEARCH  
ON GENDER AND TRADE IMPACTS**

Irene van Staveren

November 2005

Working Paper Series No. 417

**Comments are welcome and should be addressed to the author:**

c/o ORPAS - Institute of Social Studies - P.O. Box 29776  
2502LT The Hague - The Netherlands

[workingpapers@iss.nl](mailto:workingpapers@iss.nl)

The Institute of Social Studies is Europe's longest-established centre of higher education and research in development studies. Post-graduate teaching programmes range from six-week diploma courses to the PhD programme. Research at ISS is fundamental in the sense of laying a scientific basis for the formulation of appropriate development policies. The academic work of ISS is disseminated in the form of books, journal articles, teaching texts, monographs and working papers. The Working Paper series provides a forum for work in progress which seeks to elicit comments and generate discussion. The series includes the research of staff, PhD participants and visiting fellows, and outstanding research papers by graduate students.

For a list of available Working Papers and how to order see the last page of this Working Paper.

Some of the latest Working Papers are published full text (or abstract and content page) on the website: [www.iss.nl](http://www.iss.nl) (Publications / Working Papers Series).

For further information contact:

ORPAS - **Institute of Social Studies** - P.O. Box 29776  
2502 LT The Hague - The Netherlands - FAX: +31 70 4260799  
E-mail: **[workingpapers@iss.nl](mailto:workingpapers@iss.nl)**

ISSN 0921-0210

## **ABSTRACT\***

The purpose of this paper is to provide an overview of five methodological approaches to study the relationships between trade and financial liberalisation on the one hand and gender on the other hand. The paper provides certainly not a complete overview, rather, it will try to point at opportunities and constraints for research on trade impacts from a methodological perspective, and emphasises feasibility. The structure of the paper is centred on five approaches to the study of gender and trade and financial liberalization: the market equilibrium approach, the structuralist approach, the golden straightjacket approach, the value chain approach, and the trade elasticity approach. These approaches should not be taken as independent and mutually exclusive, as they will often overlap or interrelate in research practices. Nevertheless, each approach has its own methodology and emphasizes different causal factors in analysing gender impacts of trade and financial liberalization as well as trade impacts of gender relations.

---

\* The paper elaborates on a 2005 report commissioned by the Latin American Chapter of the International Gender and Trade Network (LA-IGTN) and a paper for the *Knowledge Networking and Capacity Building on Gender, Macroeconomics and International Economics* at the University of Utah in Salt Lake City, Utah, June 12-13, 2005.

## CONTENTS

ABSTRACT

CONTENTS

1	INTRODUCTION	1
2	IMPACT ANALYSIS OF TRADE AND FINANCIAL LIBERALIZATION (TFL) AND GENDER RELATIONS	1
2.1	Micro-meso-macro approach	2
2.2	The unpaid and care economy	2
2.3	Trade structure	6
2.4	Financial liberalisation and FDI	7
2.5	Comparative analysis	11
2.6	The two-way relationship of gender and TFL	12
3	FIVE METHODOLOGICAL APPROACHES	14
3.1	Market equilibrium approach	14
3.2	Structuralist approach	17
3.3	Golden straightjacket approach	20
3.4	Value chain approach	23
3.5	Trade elasticity approach	26
4	CONCLUSIONS	28
4.1	Methodological approaches	28
4.2	Empirical approaches	29
	REFERENCES	30

## **1 INTRODUCTION**

The purpose of this paper is to provide an overview of five methodological approaches to study the relationships between trade and financial liberalisation on the one hand and gender on the other hand. The paper provides certainly not a complete overview, rather, it will try to point at opportunities and constraints for research on trade impacts from a methodological perspective, and emphasises feasibility. The structure of the paper is centred on five approaches to the study of gender and trade and financial liberalization: the market equilibrium approach, the structuralist approach, the golden straightjacket approach, the value chain approach, and the trade elasticity approach. These approaches should not be taken as independent and mutually exclusive, as they will often overlap or interrelate in research practices. Nevertheless, each approach has its own methodology and emphasizes different causal factors in analysing gender impacts of trade and financial liberalization as well as trade impacts of gender relations.

## **2 IMPACT ANALYSIS OF TRADE AND FINANCIAL LIBERALIZATION (TFL) AND GENDER RELATIONS**

Research on the mutual impacts between gender relations on the one hand and trade and financial liberalization (TFL) on the other hand needs to build on a thorough historical policy analysis of both gender policies and TFL policies, as well as a reasonably reliable and broad basis of descriptive statistics of gender and of trade and financial liberalisation over a relevant period of time. The next stage, on which this paper focuses, would need to build on this in analysing the particular relationship between gender relations and TFL, addressing questions such as

- what are the likely causal relationships between gender and TFL, and what is the direction of the causation?
- which trade patterns or trends are more supportive of gender equality and which ones not?
- do differences in gender regimes between countries impact upon trade volumes?
- how can developing countries move from the ‘low road’ of low productive jobs, low value added products, the lower end in global value chains, and dead-end jobs for women in export sectors, to the ‘high road’ of both better gains from

trade and better social conditions for women in the labour market and women's empowerment in general?

It is these kinds of questions that this paper will address from a methodological perspective. In this section, the paper will discuss some general methodological issues that need to be taken into account in studies of the gender- TFL relationship. These issues are: the micro-meso-macro approach, the role of the unpaid and care economy, the relevance of the trade structure, the genderedness of financial liberalisation and FDI, types of comparative analyses, and the two-way relationship between gender and TFL.

## **2.1 Micro-meso-macro approach**

Diane Elson (1995) has developed the so-called micro-meso-macro approach to studying gender impacts of macroeconomic policies. Since trade is a macro economic phenomenon, this approach seems recommendable for research on the relationships between gender and TFL. The approach focuses on the linkages between the micro and macro levels through households, structured labour markets and other structured markets (land, credit), gender asymmetries in institutions (welfare regimes, property rights, childcare arrangements, tax systems), and macro economic policies (trade, privatisation, devaluation). At the same time, the micro-meso-macro approach recognizes trends in macroeconomic variables, such as export values or GDP growth rates that are partly driven by gender relations (female labour force participation, household dependent agricultural export supply response, female or male intensive employment sectors). So, the micro-meso-macro approach is a two-way analytical framework, moving back and forth between the micro and macro level of analysis, and recognising gender dimensions at each of these levels.

## **2.2 The unpaid and care economy**

One important way of applying the micro-meso-macro approach and moving beyond merely a gender disaggregation of one or two key variables in research on the gender-TFL relationship, is through integrating the unpaid and care economy into the analysis. Unpaid work and care, as economic activities, have a wide variety of dimensions, just like many other forms of economic activity. Unpaid work and care cannot be characterised by just one variable – it has been analyzed over the past decade in an amazing variety of ways. Below, I will summarize seven ways in which



the unpaid and care economy may be integrated into the analysis of the gender-TFL relationship.

### *Caring agency*

Care is an expression of agency to others. Rationality, hence, cannot be reduced to self-interest but is a complex process of deliberation which expresses an agent's values, including values such as fairness (as demonstrated for example in game theory), but also values of care (van Staveren, 2001). Since caring is an interpersonal activity, there is an important distinction to be made between the wellbeing impact of a caring activity on the agent herself and the wellbeing impact on the care receiver (in the case of other-directed care), which may be opposite, as the care giver may see her wellbeing reduce (for example a reduction in leisure time) to the benefit of the care receiver (Sue Himmelweit, 2003: 248-249). This asymmetric impact of an agent's caring agency closely parallels the distinction between agency freedom and agency wellbeing that Amartya Sen has made in a critique of welfare theory and utilitarianism (Sen, 1987).

### *Unpaid work and care as productive*

Unpaid work and care have been recognised as labour, effort, productive activity, rather than leisure or the assumption that it is 'what women (ought to) do'. Moreover, unpaid work has also been recognised, in particular by Marxist feminists, as the process through which the labour force is reproduced, both in the long run, generating the next generation in the labour force, as well as in the short run in the daily care given to workers to enable them to resume their work the next day (Nancy Folbre, 1994). In other words, labour supply is not an exogenous variable proportionate to population growth, but a production factor that is in itself (re) produced (Diane Elson, 1995). Hence, care may have a production function with unpaid work as a major input, which may be affected by levels and patterns of trade.

### *Caring capabilities*

Care is more explicitly part of certain – paid and unpaid – sectors of the economy and professions attached to these sectors. For example in health care, childcare, and personal services. The care component is crucial in these professions and often constitutes the quality of the job for the worker as well as the quality of the service for

the client (Paula England, Michelle Budig and Nancy Folbre, 2002). At the same time, the caring characteristics of care sector jobs are often not recognised as skills and effort but taken for granted as ‘women’s natural characteristics’. Therefore these skills and efforts often remain undervalued, which leads to low job qualifications (as low skilled labour) and consequently to low pay (Lee Badget and Nancy Folbre, 1999; Julie Nelson, 1999), or invisibility in the case of unpaid caring work. In addition, capabilities of caring, as skills and attitudes, are not limited to paid and unpaid caring work but can spill over to agency in other economic activities, in the domains of the market and the state (van Staveren, 2002a). In other words, caring capabilities may be included in non-caring sector labour, in savings and investment decisions, and decisions to buy and sell in general.

#### *Opportunity costs of unpaid work*

Unpaid work is time consuming, that is, it takes places in real time and because of its nature it cannot reap substantive productivity gains by increasing capital intensity, division of labour, or economies of scale since it is bound to intensive human interaction. This time intensity implies that unpaid work involves opportunity costs, as has been stressed by the UN in the Human Development Report at the Women’s conference held in Beijing in 1995 (UNDP, 1995)). Given the asymmetric gender distribution of unpaid work as measured in time-use studies, it imposes a constraint on female labour supply, both in terms of the female participation rate in the labour market and in the number of hours per individual woman available for paid labour. As a consequence, on average, women tend to be, at least partly, financially dependent upon men (Janneke Plantenga, 2002). These negative impacts of unpaid work, and women’s disproportionate contribution to this domain, has initiated research that measures the opportunity costs of (women’s) unpaid work time (Luisella Goldschmidt-Clermond and Elizabeth Pagnossin-Aligisakis, 1995). There are different methods for measuring these opportunity costs, such as wage rates, which can be disaggregated for level of education, or market prices for comparable caring activities, such as the price for preparing meals or caring for children.

#### *Substitutability between unpaid work and care, the market and the state*

Many goods and services that are produced with unpaid work and caring have a (imperfect) substitute in the market or the state: childcare, meals, cleaning, nursing,

and many others. Depending on general economic conditions, households substitute between these three domains. What has become clear from studies of structural adjustment and financial crises is that when reduced purchasing power at household level forces a decline in consumption goods obtained in the market, and when public services are reduced due to public expenditure cuts, unpaid work and caring tend to provide, to some extent, substitutes for these goods and services, thereby limiting the loss in wellbeing at the household level (Lourdes Beneria and S. Feldman, 1992; Isabella Bakker, 1994; Irene van Staveren, 2002b). In macroeconomic terms, it seems that unpaid work and caring seem to behave as a counter-cyclical response to unemployment and reduced purchasing power during financial crises, deflationary macro economic policies, or downs in the business cycle (Erürk, Korküt, and Nilufer Çağatay, 1995). Particularly in the case of financial liberalisation, countries become more vulnerable to crises, which, in turn, make economies more reliant upon buffers such as unpaid work and caring.

#### *Autonomous care*

Care has been recognised as a core human and moral activity that is partially autonomous and therefore independent of economic activity in the market and the state and hence not substitutable because of the specific values that it represents (Joan Tronto, 1993; van Staveren, 2001). Apart from the various economic dimensions and meanings of care as mentioned above, care is also a moral activity, expressing cultural meaning, as well as embedded, shaped, and challenged in social structures. This is often referred to as the paradox of care (Folbre, 1995): it is in the first place moral, cultural, and social activity, not exchanged in the market, carrying no price, while at the same time it often involves labour, is productive (although sometimes invisibly so) and implies opportunity costs (if not in time than emotional). Hence, caring is an activity that is partly independent from economic processes and the value of money, and therefore it has an autonomous part that is not substitutable with market and state activity. Too much pressure on caring may crowd out minimally necessary levels of care to sustain households, to improve the wellbeing of children and to develop human resources in general.

### *Unpaid work and care as gendered activity*

Last but not least, unpaid work and care have been understood by feminist economists as a highly gendered activity with gendered meanings, asymmetrically distributed over men and women (Lee Badger and Nancy Folbre, 1999; Julie Nelson and Paula England, 2002). This insight implies that an economic analysis of unpaid work and care needs to be gender disaggregated, since it is very likely that unpaid and caring activities impact differently on the economic lives of women compared with men. In turn, women's disproportionate share of unpaid work constitutes a constraint on their participation in and gains from the market and the state. As a consequence, economic theory, empirical analysis as well as economic policies should be gender-aware, recognising the asymmetric distribution of unpaid work and caring over men and women, as well as the gendered opportunities and constraints for women's economic position that result from this asymmetry.

### **2.3 Trade structure**

The particular trade structure of a country or region should be underlying the analysis. This structure is characterised by several distinctions, such as:

- resource-based exports to countries outside the region, manufacturing imports from outside the region
- manufacturing exports and imports within the region, with an increasing division of labour between countries within regional trade blocks: does trade affect gender differently through intra-regional trade compared to trade with third countries and trading blocks?
- increasing role of trade in services (financial services, tourism, labour migration related to personal services) and, through privatisation, also in basic social services (water, energy, health care, public transport).

The trade structure, however, is not only determined by exports but equally so by the impacts of imports on domestic sectors, which may force changes in the domestic economy's structure. In particular, attention to this effect seems relevant in the case where women are increasingly concentrated in vulnerable jobs in sectors that face increasing import competition, while men may be increasingly concentrated in more stable sectors, either not affected by import competition, or stable export sectors

(see, for such a preliminary finding in a case study on trade between Mercosur and the EU: Espino and van Staveren, 2001).

#### **2.4 Financial liberalisation and FDI**

Financial liberalisation cannot be disconnected from trade, because in practice, trade and finance are intertwined. Export production through foreign investments has a combined effect on gender relations, which cannot easily be disentangled. Moreover, the traditional distinction between gains from trade through specialisation on comparative advantage leading to productivity gains on the one hand, and through increasing levels of technology leading to productivity gains on the other hand, is less meaningful in an increasingly globalized world of export processing zones, buyer-driven global value chains, and migration of skilled workers. That is also why some trade economist have argued that trade models cannot distinguish between trade effects and technological change (Leamer, 1999). As a consequence, it will be difficult, and probably unwise, to separate the analysis of gender impacts of trade from those of financial liberalisation. Of course, financial liberalisation should be understood as occurring in roughly two forms: portfolio investments and foreign direct investments (FDI). Whereas the former may not be related to trade at all (except in a macro economic sense as balancing the Balance of Payments through the capital account), as portfolio investments may end up in real estate, the banking sector, or government bonds, the latter – FDI – is often related to trade, as it facilitates export production by multinationals (MNCs), inside or outside export processing zones (EPZs). This closer link of FDI to trade, compared to portfolio investments, does not imply, however, that research on TFL should ignore portfolio investments. In fact, they appear to be the crucial type of foreign financial flows in times of financial crisis, as they are highly mobile and can be withdrawn almost overnight, as was the case for Argentina in December 2001. In other words, financial liberalisation seems to have two types of relationships to gender:

1. indirectly, through FDI, facilitating export production by MNCs
2. directly, through financial instability of portfolio investments.

In van Staveren (2001), I have elaborated the second point, by distinguishing four types of gender problems in global finance.

### *Undemocratic: under-representation of women*

Women are hardly represented among the main decision-makers in financial markets and institutions. This tends to marginalise women's issues in policy processes regarding government lending, investment rules, and private-sector financial activities. The boards of the World Bank and the IMF are strongly dominated by men. In the World Bank, less than 10 per cent of the Executive Directors and Senior Officers are female.<sup>1</sup> Likewise, G-7 decision making can hardly be regarded as democratic, and certainly not as gender balanced. Likewise, the World Trade Organisation is an almost exclusively male forum. In the private sector corporate decisions on finance are taken in boardrooms that are largely male domains. Men dominate decision-making in global finance, but women experience the greatest negative effects of these decisions (Grown *et al.* 2000). A more equal representation of men and women in the boards of international financial institutions, national financial bodies, and financial corporations would make policy more democratic from a gender perspective. Greater gender equality in decision-making on financial governance would better represent the interests of both men and women. This could prevent the large opportunity costs that women currently experience in global finance.

### *Inequitable: increased gender gaps*

The globalisation of finance has brought some advantages for women. Firstly, it has increased competition in finance, and hence the supply of credit for diversified target groups. Through this process women have gained more access to credit, although not equally in the formal and informal sectors. Secondly, in some countries it has become easier for women to access foreign exchange markets, for example, to receive remittances from partners or relatives abroad, or to send funds home to family. Thirdly, the much-expanded financial sector in the contemporary economy has substantially increased opportunities for women's waged employment (albeit for the most part in lower paid and less protected jobs) (McDowell and Court 1994). However, these gains need to be balanced against disadvantages for women. Like other markets, financial markets are characterised by segmentation, involving distortions and transaction costs (Yotopoulos and Floro, 1992). Some authors even

---

<sup>1</sup> World Bank Annual Report 1999 and <http://www.worldbank.org/html/extdr/about/orgcharts/officers/>.

argue that financial markets suffer from deeper imperfections than other markets, in particular from asymmetric information, agency problems, and adverse selection (Singh and Zammit, 2000: 1255). In financial markets, the following three main gendered structures of constraint can be identified: gender inequality in property rights; gender segmentation of financial markets; and discriminatory norms in the supply of finance.

*Unstable: gender-based instability in financial markets*

Financial instability can never be abolished completely, but we can question the adequacy of the present institutional framework of national and international financial markets. From a gender perspective such reconsideration is all the more urgent owing to the particularly adverse consequences of recent financial crises on women. Austerity measures connected with structural adjustment tend to hit women doubly hard. In the prevailing gender division of labour, women are usually responsible for household food security, family health care, and the supply of household energy and safe drinking water. Thus cuts in government budgets concerning food subsidies, agricultural inputs, health services, and sanitation hurt women more than men. In addition, cuts in educational budgets do not help to reduce the school enrolment gap between boys and girls (Elson, 1998). A shift of the burden of financial risk to those who are not responsible for it is costly and unfair. This shift has a significant gender dimension. The generation of excessive financial risk is almost exclusively a male activity. Men are the main decision-makers in finance, men undertake the larger financial transactions, and men are the main speculators. Yet the persons who carry the consequences of global financial crises – especially in the care economy – are predominantly female. Research is incomplete, but various case studies suggest that women in the developing world experience significant increases in unpaid work time during economic crises (Sparr, 1994; Elson, 1995; UNDP, 1995). So women's unpaid work in fact compensates for (mainly male) rent-seeking in financial markets.<sup>2</sup> This buffer function should not be overstretched. The resultant burden of extra work on women can generate a spiralling sequence of negative externalities that adversely affect real and financial markets. Such negative externalities include unattended small

---

<sup>2</sup> Regarding the Asian crisis, for example, Diane Elson and Nilufer Catagay remark, 'Creditors were in effect "bailed out" while poor women acted as unpaid provisioners of last resort' (2000: 1355).

children, with consequent psychological and health risks. Human capital formation of children may decrease, particularly among girls who are required to do unpaid work for the household. The quality of health care and hygiene declines when the family substitutes for private or public services. Such negative externalities are not only inequitable – disadvantaging women and the poor – but also inefficient, as point four below will state.

Resources in the care economy may become exhausted, with consequent reductions in the quality of care (Moser, 1989; Pearson, 1997). In addition, the recovery of the monetised economy from a financial crisis can be paralysed. When non-monetised savings (through greater unpaid work) increase more than investment, the monetised economy may suffer from a lack of effective demand (Ertürk and Çagatay 1995). When government services are cut too much, the quality of health care, education, and other services will suffer, with negative consequences for the level of human capital in the labour force, which will impact negatively on a country's productivity (Elson 1998). When a financial crisis leads women to shift resources from the market to unpaid production – for example to subsistence food – market demand will not be enough for recovery from a crisis.

*Inefficient: inefficient resource allocation in financial markets due to discrimination*

In the experience of the Grameen Bank in Bangladesh, loans to women yield substantially higher household consumption than loans to men. In the case of women, it takes an average of 0.91 dollars lent to generate 1 dollar of household consumption, as compared with 1.48 dollars for men (Morduch, 1999: 1593). The Grameen experience shows that lending to women is not less profitable than lending to men – on the contrary. Moreover, female repayment rates are higher. In 1991, 15.3 per cent of male borrowers from the Grameen Bank missed repayments, compared with only 1.3 per cent of female borrowers (Morduch, 1999: 1583). A similar record is found in lending to women elsewhere (Women's World Banking 1996).

Cost-benefit ratios of investing in women are even higher with respect to agricultural investments. A World Bank report entitled 'Gender, Growth, and Poverty Reduction' estimates losses in real output that result from gender biases in investment. In Burkina Faso, for example, a transfer of resources (like fertilizer and labour) from men's to women's plots of land within the same household could increase agricultural output by 10-20 per cent (World Bank 1999: 10). Research in



Tanzania indicates that reducing time burdens of women in the care economy could increase household cash incomes for smallholder coffee and banana growers by 10 per cent, labour productivity by 15 per cent, and capital productivity by 44 per cent (World Bank 1999: 20).

Regression analysis over the period 1960-1992 with GDP growth as the dependent variable and education and employment among the independent variables indicates that Sub-Saharan Africa has suffered considerable efficiency losses from gender biases in investment. If Sub-Saharan Africa had matched East Asia's growth of educational attainment for women, annual per capita GDP growth would have been about 0.5 percentage points higher (World Bank 1999: 15). In addition, if Sub-Saharan Africa had matched East Asia's growth rates in female sector employment, annual per capita GDP growth would have increased by more than 0.3 percentage points (World Bank 1999: 16). So, together, gender biases in investment in education and in employment have reduced annual per capita GDP growth in Sub-Saharan Africa by 0.8 percentage points (World Bank 1999: 17).

Similar productive gains would likely also result from a correction of gender disparities in respect of other assets. For example, research on micro-credit in Bangladesh concludes that loans to women generally yield higher marginal returns than loans to men (Pitt and Khandker 1998). Given present gender inequalities in the allocation of credit, this outcome is not surprising, given the law of diminishing returns. However, gender equality in access to resources will only translate into productive gains, household well-being and economic growth when these resources receive a market price, which is not the case when discrimination operates. As Stephanie Seguino (2000) has shown, wage discrimination persists in spite of increased levels of female human capital.

## **2.5 Comparative analysis**

There are two dimensions to comparative analysis: space and time. Whereas, traditionally, the first one is addressed through cross-section analysis, comparing countries or country groups with each other, the second one is addressed through time-series analysis, focusing on changes for one country or region over time. Sometimes, the two methods are combined to generate a wider data set, whereas ideally panel data might be used. For research on gender and TFL, both dimensions seem relevant:

- Space dimension: are there differences in trade patterns and structures for different countries? Here, in particular the difference between intra-regional and inter-regional trade is relevant. Subsequently, it is interesting to ask whether such locational differences have also differentiated impacts on gender variables.
- Time dimension: do trade patterns and structures change over time, and does this influence gender relations? The time dimension may lead to compare countries having long-established stable trade relationships, with countries that only recently have opened up to trade in goods and services, as well as to foreign investments.
- Additionally, comparative analysis might group countries on the basis of certain key features that clearly distinguishes them, such as:
  - capital controls or financial liberalisation
  - traditional trading pattern or recent trading pattern
  - types of trade agreements, according to tariffs, quota, product categories, or investment regulations
  - high gender equality or low gender equality in particular variables
  - Institutional/policy context, for example in terms of tax regime; welfare policy regime; labour standards.

Finally, a word on the selection process of countries for groupings. A top-down approach would be to select one key feature and to group countries according to whether they possess this feature or not. This may be a trade feature, a gender feature or an institutional feature. A bottom-up approach would be factor analysis, or more generally cluster analysis, in which groupings of countries emerge when a statistical relationship between two variables is presented in a graphical way, such as a scatter plot.

## **2.6 The two-way relationship of gender and TFL**

It is important that the two-way relationship of gender and TFL is recognised in research, and indeed, reflected in the empirical methods, such as country groupings for comparative analysis. Of course, the two directions of the relationship are related over time and through feedback effects, but methodologically it makes sense to keep them in mind in the research design. In particular, one may think of building in time lags and dummies for gender variables as these tend to change slowly and tend to be

closely linked to particular cultures, hence, having regional effects. Also, keeping the two way relationship in mind matters for policy advice, in particular if a research outcome would be that gains from trade and/or financial liberalisation could be higher or more stable with more gender equality. The following elements might be taken into account for each direction of the relationship:

*TFL impacts on gender:*

- Gender equality (labour market variables and other variables)
- Feminization of poverty (income, time poverty, human development)
- Millennium Development Goals (MDGs)
- Perpetuation of gender stereotypes (incl. labour market segregation)
- Women's empowerment (such as financial independence, or decision making power in the household)
- Unpaid work and caring as a buffer function in times of crisis

*Gender impacts on TFL:*

- Trade value and trade balance
- TFL pattern (resource based or manufacturing or services; which are the major trading partners in the region and external; stability of pattern; terms of trade; financial flows: origins, destination, breakdown between FDI and portfolio investments)
- Sustainability of trade balance and trade pattern incl. food security
- Sustainability of financial flows (balance of capital account as well as distribution of short term and long term capital)
- GDP growth (share of (EX-IM) in GDP, value added of exports, Total Factor Productivity (TFP) in export sector compared to non-trade sectors, forward and backward linkages and subsequent employment creation of export industry or FDI, tax revenues from foreign-owned export firms)
- Macro economic stability (trade balance, dependence on foreign investment in relation to domestic savings, balance between government spending on attracting and keeping FDI in exports and tax revenues from FDI production and export; impacts of trade balance on value of currency or necessary reserves in the central bank; volatility of prices in export markets, currency, and financial markets (interest rates))

- Moral hazard in financial markets, when bail-outs and/or the buffer function of the care economy allow excessive male rent seeking which leads to instability.

### **3 FIVE METHODOLOGICAL APPROACHES**

After the general methodological issues discussed above, this section will briefly review the five methodological approaches to researcher on gender and TFL.

#### **3.1 Market equilibrium approach**

##### *General equilibrium analysis*

Mainstream macro economic analysis assumes perfectly competitive markets, which might be ‘distorted’ by trade barriers. This implies for example equilibrium in the labour market at full employment (except in the case of wage rigidity). The method used here is often a CGE model (Computable General Equilibrium model). These models can be made gender-aware, as has been done for example by Marzia Fontana and Adrian Wood (2000) and Fontana (2002). In the Fontana trade model, gender is integrated in two ways. First, by disaggregating most variables into female and male variables. Second, by adding a sector for unpaid work, so that labour time is allocated over paid labour, unpaid work (‘social reproduction’ in the model), and leisure, which is also modelled as a sector. Now, the next method used is a SAM, a Social Accounting Matrix that has also been gender disaggregated. This gendered SAM, the Social Accounting Matrix, provides gender disaggregated data, such as time spent by men and women on paid labour in the various market sub-sectors, time spent on unpaid work and time spent on leisure, as well as the gender wage gap and female/male employment shares in each sector. Both the unpaid sector and the leisure sector have, just like the market sub-sectors, a production function, describing the conversion of labour into unpaid production and leisure respectively. The output of the unpaid sector is labour with a certain level of education, which functions as an intermediate input in the production function for the market sub-sectors. The demand for unpaid work and leisure is given by household preferences and is a declining function of price (= opportunity costs of unpaid work and leisure time). Unpaid work is not just a constraint to female labour supply, but also understood as an endogenous variable, through its opportunity costs (the female and male wage rate), the demand

for unpaid work by households, and the production of unpaid services in a production function.

The types of hypotheses that can be tested with such a gender-aware CGE trade model are, for example:

- Does a low elasticity of demand for care constrain female labour supply to the export sector?
- Will increased demand for female labour in the export sector lead to increases in female wages (and, *ceteris paribus*, a narrowing of the gender wage gap)? And what is the effect on female leisure time?
- What would be impacts on women's wages, employment, unpaid work and leisure time of different substitution rates between male and female labour and between paid and unpaid work in the case of an increased demand for female labour in the export sector?

The market equilibrium approach, in particular through CGEs, does not lend itself very easily to comparative country analysis, as one analyses one country at a time, with one SAM, and trade with all other countries (aggregate export and import data). But the method, repeated for more than one country, might give insights into how different comparative advantages between countries may have different gender impacts of trade. So, it may follow that countries differ according to the trading sectors they are active in, such as resource based exports versus manufacturing exports.

#### *Gravity model analysis*

A special type of trade models used in the empirical analysis of bilateral trade between countries, regions, or trade blocks are gravity models. Gravity trade models are closely linked to CGEs, sharing the same assumptions of free markets, adaptive prices, and equilibrium. The analysis of trade impacts involves the comparison of two periods of time – comparative statics – before and after a change in trade policy or related variables. Gravity models are derived from geographical economics, in which distance is an important variable explaining regional patterns. In order to fit well with the underlying theory, gravity models of bilateral trade model distance relative to other trading partners (James Anderson and Eric van Wincoop, 2003). Other variables, besides distance, can be included in the model, such as cultural differences (often measured as language), or institutional differences, such as trade unions (see,

for example, Jeffrey Frankel, Ernesto Stein, and Shang-Jin Wei, 1998). These two features of gravity models, the relative rather than absolute importance of variables in a bilateral trade relationship, as well as the fact that other variables than distance can be modelled, make it possible to adapt gravity trade models to the analysis of impacts of gender on trade.

Gender variables might be thought of as either institutional or cultural. Institutional gender variables influencing bilateral trade values might include the implementation of gender equality laws in labour law, for example on equal pay, or the length and financial compensation of maternity leave, or the share of women in decision making positions, as measured by the Gender Empowerment Index (GEM) in the Human Development Reports (UNDP, 2004). Cultural gender variables influencing bilateral trade values might be taken from the gender attitude index from the World Values Surveys, as has been calculated by Ronald Inglehart and Pippa Norris (2003). This is an index of cultural attitudes towards gender equality measured for about 70 countries in the world.<sup>3</sup>

Regression results obtained by Inglehart and Norris show that this attitudinal indicator of gender equality is strongly and significantly related to economic variables such as GDP per capita, and human development variables such as the Human Development Index (HDI), share of agriculture in GDP (negative relationship), or the urbanization rate. Also, the index shows a strong and significant relationship with objective gender indicators such as GDI, GEM, and contraceptive prevalence rate. Using the index in a gravity equation, or in any other trade model that can accommodate cultural difference variables, might reveal whether cultural gender differences have an impact on bilateral trade values.

Gravity models are linked to CGEs, but the underlying idea of power variables attracting trade between two trading partners, relative to other trading partners need

---

<sup>3</sup> Their study uses agreement (from “strongly agree” to “strongly disagree”) with the following five-item gender equality scale to measure differences in attitudes toward gender equality between and within countries (for all items except the last, agreement indicates more traditional gender attitudes):

- Men make better political leaders than women do
- Men should have more right to a job than women
- University education is more important for a boy than a girl
- It is necessary for woman to have children in order to be fulfilled
- Women should have children as a single parent if they wish

Country data for the five attitudinal gender variables can be found on the website of the World Values Survey ([www.worldvaluessurvey.com](http://www.worldvaluessurvey.com)).

not necessarily be modelled with a CGE. Particular variables explaining trade between trading partners may very well be estimated in a simple model of a single equation. Possible hypotheses in a gravity approach would focus on gender power variables attracting trade (either imports or exports produced by a largely female workforce) such as the cultural variables referred to above from the WVS. Alternatively, hypotheses might be developed around gendered institutions. A nice example is the empirical work by Stephanie Seguino (2000), who follows the idea of gravity models, although using more simple equations with a gender wage gap variable. The approach may lead, for example, to the following hypotheses:

- Does a big gender wage gap in the production of exports or imports increase bilateral trade volumes, relative to trade volumes with other trading partners?
- Is the trade volume likely to be bigger or smaller between countries with similar levels of gender attitudes (gender cultural variables)?

Country groupings in the spirit of gender gravity variables would be such that countries with similar gender variables would be grouped together in order to find out whether gender relations, ranging from equitable to less equitable, would have positive or negative impacts on trade values. Such country groupings might result in finding country groups in which trade success can be partly attributed to gender relations (expressed through gendered institutions or gendered values), positively or negatively. It might, however, also reveal countries in which gender relations are relatively equitable without negative impacts on exports (presumably, as long as they trade with countries with similar gender arrangements). The grouping might best evolve from factor analysis with gender variables and/or with trade values.

### **3.2 Structuralist approach<sup>4</sup>**

Structuralist models replace the equation in a CGE model that posits that the wage rate is determined by its marginal productivity by a fixed nominal wage rate. In addition, many structuralist models assume excess capacity, which leads to a demand for labour as a function of the supply of goods and services, and an oligopolistic market structure. In other words, the level of employment is endogenously determined and may be below the level of full employment. A structuralist model may be

---

<sup>4</sup> For a more elaborate analysis of gender, and in particular care, in CGE models and structuralist models, see van Staveren, 2005).

supplemented with an exogenous level of investment in line with the Keynesian theory of money, reflecting ‘animal spirits’. As a consequence, such structuralist models are determined at the demand side, that is, income equals the value of output, consumption is a fraction of income and output adjusts to satisfy the aggregate demand-supply balance. For the analysis of gender and trade, there are at least three examples of this type of models (Darity, 1995; Ertürk and Çağatay, 1995; Warner and Campbell, 2000). Each of these models has brought gender into the structure of the economy as follows:

- the unpaid economy or care economy
- gendered division of labour in the household
- norms stipulating female care giving for males and children
- unpaid production substituting for paid production

At the household level, for analyses that do include the intra-household level of analysis, gender asymmetries might be pictured through a so called ‘social coercion parameter’ (Darity, 1995), fixed lower values for female time spent on unpaid work, or fixed lower values for male consumption of care provided by female household members, or male decision making power over the distribution of income in the household (Warner and Campbell, 2000). At the macro level, the analysis may focus on the substitution of women’s paid and unpaid work in relation to the business cycle, as Erürk, Korküt, and Nilufer Çağatay (2000) have done, or in relation to trade, either through women’s export production labour or through loss of jobs in the import competing sector. Such structuralist models are well-suited for the micro-meso-macro approach proposed by Diane Elson for feminist macroeconomic analysis. They allow not only gender differentiation in the paid economy, but also in the unpaid economy and therefore reveal the following issues on unpaid work and the care economy:

- unpaid work is partly a substitute for paid work (and the other way around of course) responding to both micro forces (in the household) and macro forces (such as trade opportunities)
- unpaid work is partly complementary to paid work, either intrinsically, or normatively, in this last case often bound to women in their roles as mothers and wives



- the productivity of women's unpaid production is endogenous and depends not only on prices, such as wage rates, but also on household income, employment levels, time spent on unpaid work, and, implicitly, on intrinsic motivation.

But apart from the role of the unpaid/care economy, structuralist models can address gender in a variety of ways. For example, Ellen Houston (2005) has applied a neo-Schumpeterian model to analyse impacts of the gender wage gap on trade performance. That model does not rely on comparative advantage but competitive advantage. Her conclusion is that the gender wage gap is an important determinant of exports for OECD countries, and even more relevant than the relative unit labour costs. Houston's paper also shows that gender inequality does not necessarily prevent countries to follow the 'high road' to development: for high road countries, the gender wage gap appears to be insignificant in explaining the export share while for low road countries it is highly significant.<sup>5</sup> Following up on this, the low road / high road distinction might be engendered by adding a gender equality indicator to it, for example on the gender wage gap, or the level of the GDI (Gender Development Index) of the UNDP.

Others also have addressed structures, such as labour market institutions, in explaining gender inequality in labour markets. For example, Blau and Kahn (2003) have shown that labour market institutions supporting gender equality are more important than other factors, including those related to TFL. Hypotheses based on structuralist models will focus on competitive advantages as well as structures that may drive or constrain such advantages:

- What are the competitive advantages that countries exploit in their trade? Are there gender dimensions to these competitive advantages (f.e. gender wage gap, low-unionisation rates, and flexible workers)?
- To what extent do stricter legal measures on gender equality and/or stronger enforcement of gender equality laws in the labour market reduce a country's competitiveness?

Country groupings would logically follow institutional similarities (for countries in the same group) and institutional differences (for countries in different

---

<sup>5</sup> As a crude measure distinguishing high road from low road development, the following two measures have been suggested by Ute Pieper (2000): 3% productivity growth and 3% employment growth.

groups). Houston (1995), for example, has distinguished between high road and low road countries.

### **3.3 Golden straightjacket approach**

Dani Rodrik (2002) has pictured the trilemma in which many developing countries find themselves in terms of their macroeconomic policies as follows: ‘pick two, any two’. He argues that a developing country in the era of globalisation – greater openness to trade and international finance, as well as to internationalised production, and to a lesser degree labour migration – needs to sacrifice either its nation state or democracy. They cannot have it all, as is also the message of critical thinkers about globalisation such as Naomi Klein (2001) and Noreena Hertz (2001). In fact, giving up the nation state implies world federalism, and with the weak UN and other possible federalist structures (of regional trade blocks, custom unions or monetary unions), this is clearly not feasible in the medium term. The only option with which developing countries with wide open markets for goods and capital are left is sacrificing democratic politics, by following so called ‘golden straightjacket’ type of policies. This implies implementing and strictly enforcing macroeconomic policies that will make and keep a country attractive for international markets:

- tight monetary policies
- small government
- low taxes on trade, investment, and profit
- flexible labour legislation
- deregulation
- privatisation
- maximum possible openness to goods and capital.

The golden straightjacket approach to trade openness has been critiqued thoroughly by Ha-Joon Chang (2002), who has argued that, contrary to the Washington Consensus, this was NOT the policy package followed by the now developed countries. Instead, these countries have pursued the following policy mix:

- protection of infant industries
- export subsidies
- welfare state development
- strict financial regulations

- collective wage bargaining
- investment coordination
- nationalised industry.

George DeMartino (2000) agrees with the above critiques and has suggested an alternative macro economic strategy for developing countries, which consist of less globalisation, and more global level social standards. He rejects the theoretical solution, favoured by trade economists such as Jagdish Bhagwati (2004), to have free trade but with Pareto welfare compensation of the losers by the winners, as there exists no international mechanism to enforce such redistribution. In particular, he advises countries to reduce the currently excessive level of international competition, by changing the ‘rules of the game’. The main change would be to no longer legitimise differences in labour standards as a competitive advantage for countries. Instead, he proposes a global harmonization of labour standards. In practical terms he proposes a system of social tariffs, which he labels Social Index Tariff Structure, in which countries are grouped according to their level of human development (through the Human Development Index) with in addition inequality scores. Countries would only be allowed to trade with countries with lower scores when paying a social tariff, which should go into a fund from which human development improvements would be funded.

Another alternative has been proposed by Thomas Palley (2004) who advises developing country governments to shift from a strategy of export-led growth to a strategy of domestic demand-led growth, based on a ‘level playing field’ between business and labour. This would imply sufficient wages to generate domestic demand and sufficient jobs to sustain high levels of employment. Palley claims that such a macroeconomic strategy would generate efficiency gains (that would counterbalance the loss of gains from trade). These gains are to be found in the generation of effective domestic demand as well as in future growth through investment in human capital (no child labour, efficiency wages, reduction in discrimination).

In the well-documented collection of studies on gender and subcontracted work for globalised markets, Radhika Balakrishnan (2002) has distinguished between push and pull factors for firms to subcontract. The pull factors are productivity-enhancing, and imply continuous skill investment. This would lead, even in segmented labour markets, to improved employment conditions for women, who are often the majority

of subcontracted workers. But, most subcontracting is determined by push-factors, which follow from golden straightjacket type of macroeconomic policies. Here, the focus is not on productivity increases but on cost reduction, in particular in the face of what Balakrishnan refers to as excessive competition (like DeMartino). In her book, Balakrishnan argues, in a chapter with Asad Sayeed (2002: 18), that “[i]t is important to note that this kind of competition is largely a result of liberalisation...”. Moreover, the case studies in the book show that “[n]iches in this case shift from products to workers. Employers/producers then prowl for women and children of the poorest households ... [o]nce such segmentation in the labour market is intensified, then the wage rate in the labour market as a whole also drops” (Balakrishnan and Sayeed, 2002: 19).

Hypotheses that might be thought of in the golden straightjacket approach to analyse the relationships between gender and TFL, should focus on macro economic policies, that is, the typical golden straightjacket policies as well as their alternatives. For example:

- To what extent have capital controls limited women’s employment opportunities, compared with countries without capital controls? If not, are there any other positive or negative gender effects of capital controls?
- To what extent has privatisation of important sectors to foreign firms improved or worsened women’s employment conditions?
- To what extent has privatisation of important sectors to foreign firms improved poor women’s access (as consumers) to the goods produced (price reductions; quality improvements)?
- To what extent has strict inflation control (tight money policies), or a currency union (dollar peg) reduced gender differences in wellbeing (GDI, purchasing power)?
- To what extent have tax reductions benefited women, directly or indirectly? Or do they face a gendered fiscal squeeze through a shift of tax revenue to income tax and sales tax?
- What are net effects of reductions of government expenditures for women?

Suggestions for country groupings in this approach would cluster countries according to similar macro economic policies – the golden straightjacket – in order to see whether the trade performance, financial positions and stability and gender

dimensions fare better or worse according to the following of the Washington-Consensus policies.

A final word on methods of data collection and data analysis: this approach involves a balance between qualitative data, on macroeconomic policies, and a mix of qualitative and quantitative data, on policy impacts. It does not require complex economic modelling, nor advanced statistical analysis, but it may require some regressions with different policy variables, or, for qualitative data, comparisons of means between groups of countries, in order to check whether different macroeconomic policy packages would have significantly different impacts on trade, international finance, and gender variables.

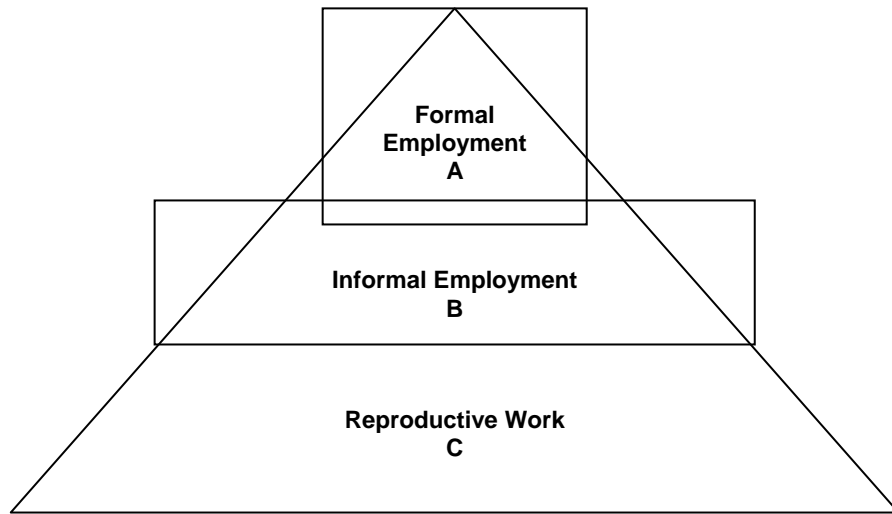
### **3.4 Value chain approach**

Value chain analysis focuses on the vertical linkages between firms, both upstream and downstream. The value chain perspective draws attention to the sequence of activities stemming from product conception to the final consumer, involving trade between two or more countries along the chain. Control of a value chain does not require owning the manufacturing operation neither direct management of all activities, as many value chains are characterised by sub-contracting (Cowling and Sugden 1993). In value chains that produce and sell labour-intensive consumer goods, which often involve a large share of female workers, the leading actors are often large retailers, (ex-) manufacturers of established brand names and import-wholesalers. In such buyer-driven chains these lead firms to "... act as strategic brokers in linking overseas factories with evolving product niches in the main consumer markets..." (Gereffi, 1999). This dependence on a small number of global buyers runs the risk of remaining locked-in to low skill and low value added export production, which limits the gains from trade for the exporting country (Hobday, 1995) – a lock-in in low-road development. In turn, such lock-in into low-value added production prevents export producers to invest in the upgrading of skills and acquirement of new technology, and in turn preventing its employees to increase their human capital and improve their wage levels through productivity increases.

Since most buyer-driven value chains are in female intensive sectors, such as garments, microelectronics and agricultural processing, such value chains are likely to prevent improvements in the labour market position of female employees (beyond, obviously, an expansion of female employment). Recently, some research has been

done other gender in global value chains which seems to confirm this disadvantaged position of women workers both as employees as well as as own-account workers through sub-contracting at the lower end of the value chain. For an example of a gender-aware approach to value chain analysis, see Stephanie Barrientos, Catherine Dolan, and Anne Tallontire (2003), and also, in a more general sense, Marilyn Carr and Martha Chen (2004). Methods to be used in value chain analysis are largely qualitative. As value chains connect the micro to the meso level of trade, methods should be able to capture this link. Often used methods in this approach are surveys, interviews, and group discussions with key actors along a chain. Survey data, which is not always quantifiable, can be analysed in a comparative way, in order to find significant differences between groups – which may be countries, sectors, product value chains, or groupings according to other relevant criteria, including gender (male intensive versus female intensive value chains, for example). Complementary to surveys, value chain studies use other qualitative methods, such as interviews with key players along the value chain. This allows the researcher to get insights into the opportunities and constraints that agents face at the various stages of the value chain. Finally, researchers of value chains have used group-level qualitative methods. One such method is focus group discussions, which probe into the participants' motivations, beliefs, and ideals (see, for example Irene van Staveren, 1997). Focus groups, in other words, are about the *why* behind decisions and behaviour, not about the actual behaviour itself. Another group-level method of data collection is that of a meso-card workshop, in which participants discuss the main challenges they are faced with (see, for example, Peter Knorringa and Irene van Staveren, 2005), for example in their roles as subcontractors or as home-based workers at the bottom of a value chain. Data collected through these varied methods can subsequently be analysed in a gender-aware value chain analysis, as proposed, for example, by Barrientos, Dolan and Tallontire (2003). In particular, they have developed an analytical scheme of three interlinked levels of a so called 'gender pyramid' to assess the gender awareness of codes of conduct in a value chain: formal employment, informal employment, and reproductive work (see figure 1).

**FIGURE 1**  
**Gendered Employment and the Gender Pyramid of Codes**



Source: Barrientos, Stephanie, Catherine Dolan, and Anne Tallontire (2003) 'Gendered Value Chain Approach to Codes of Conduct in African Horticulture', *World-Development* 31(9), p. 1516.

Subsequently, the authors have carried out a gender mapping of relevant codes of conduct for each value chain, in which they have assessed whether particular labour standards have been covered by these codes and to what extent each of these labour standards pay attention to gender issues. But a gender-aware value chain analysis need not necessarily focus on codes of conduct. The approach may also address wider employment issues such as gendered job segregation or the gender wage gap, as well as the question to what extent involvement of female subcontractors in a global value chain provides better income security or opportunities for upgrading towards higher value added activities with higher profit margins, compared to supplier relationships outside global value chains (see also relevant political economy questions posed in Carr and Chen, 2004). Alternatives to global value chains are, on the one hand, regional value chains, particularly in regional trade blocks such as Mercosur or NAFTA, and on the other hand, domestic value chains or with a small foreign component, not likely to be dominated by a foreign buyer.

The kinds of hypotheses that may be derived from a gender-aware value chain analysis are micro-level hypotheses, focusing on firms, intra-firm trade and inter-firm trade, as well as on informal suppliers. In particular, labour and employment conditions as well as opportunities and constraints for small scale female

entrepreneurs, would be the angle for looking at the gender – TFL relationship. A gender analysis of labour standards would particularly focus on sector-wide and chain-wide codes of conduct. Hypotheses, hence, could be about the extent to which:

- value chains have codes of conduct
- enforcement of codes of conduct throughout a value chain

A wider focus on employment conditions and female entrepreneurs might lead to hypotheses about the gender outcomes of particular global value chains compared to intra-regional value chains and domestic value chains. For example:

- are there significant gender differences in employment conditions and opportunities for female small scale entrepreneurs between regional value chains (f.e. automobile industry in Mercosur) and global value chains (f.e. the fruit sector in Chile and Argentina)?
- are there significant gender differences in employment conditions and opportunities for female small scale entrepreneurs between types of value chains (f.e. manufacturing or agricultural processing, or for major brand names or generic)?

Country groupings in the value chain approach may arise from clustering countries according to similar types of value chains:

- per sector
- per buyer country
- per level of labour standards or code of conduct (in order to compare impacts of standards or codes on women's labour conditions)
- intra-regional value chains versus global value chains.

### **3.5 Trade elasticity approach**

This method, developed by van Staveren (2003), is strongly policy-oriented, as it is meant as a tool for policy makers to mainstream gender equality goals in trade policies. It is simple, allows easily for country comparisons, it is dynamic, and necessary data are for the most part widely available, hence, it is a feasible tool for policy makers as well as others concerned with monitoring gender impacts of TFL, such as women's NGOs. The indicator used is formulated as an elasticity. Trade elasticities of gender inequality bring together trade and gender variables in a ratio, in which the denominator measures changes in trade values, whereas the numerator measures changes in gender inequality. Obviously, such a simple indicator suffers



from serious limitations. In particular, elasticities do not imply any causal relationship, not even a correlation, between the two variables expressed in the numerator and denominator. For theoretical back-up, I will rely in particular on Nilüfer Çağatay , Diane Elson and Caren Grown (1995 and 2000), two special issues of *World Development* on relationships between gender and macro economic policies, including trade policies.

The major methodological limitation of an elasticity is even aggravated when applied to trade impact analysis. The problem we face here is twofold. First, it is very difficult to distinguish between effects of trade and effects originating from other factors. Changes in gender (in)equality may arise from a variety of policies and trends, such as labour supply trends, labour market policies, structural adjustment policies, technological change, investment choices or fluctuations in aggregate demand. Second, it is almost impossible to distinguish between the impacts of trade among two trading partners on the one hand and impacts of trade with third parties on the other hand. This difficulty can be reduced a bit by focusing on trade effects for major trading partners only, focusing on relatively high values of trade, ignoring trade relationships with minor trading partners. A final methodological limitation of using trade elasticities of gender inequality is to be found in the data. The reliability of the data on women's labour market position is often doubtful since women's work tends to be more informal, part-time, and flexible compared to men's work (Guy Standing, 1999), leading to under-estimations of women's contribution in the labour market. Finally, the measurement of gender inequality in social and economic life sometimes requires data of non-traditional variables, that are absent in most statistical sources, for example data on unpaid labour time. Taking all these methodological limitations into account, trade elasticities of gender equality should be treated with considerable caution.

The denominator of the elasticity can be calculated as trade values as a share of GDP, bilateral trade values as a share of total trade of a country or region, or openness measured in tariff reductions. For the numerator, there is a potential wide variety of variables available for measuring gender inequality, but data limitations as well as limited availability of research on gender effects of trade leaves only a small number of variables to be included in the indicators. These are variables measuring poverty, employment, wages, time use, childcare, and household food security. These variables are for many countries unfortunately only available at the aggregate level, while trade

impacts can be expected to differ between sectors of the economy, in particular between export sectors, import competing sectors and the domestic sector. Nevertheless, they may provide a rough picture of the state of the art of gender inequality among trading partners, and may point out areas for in-depth research at the sector level. The kind of hypotheses that may be tested with this approach are about the size of the:

- trade elasticity of the gender gap in earned income
- trade elasticity of gender inequality in export employment
- trade elasticity of gendered job segregation in the import competing sector
- trade elasticity of the gender wage gap<sup>6</sup>
- trade elasticity of the gender gap in unpaid labour time

The guideline for selection of countries and numerator variables should be the trade policy one is addressing as a policy maker or in lobbying work. Hence, the elasticities would be calculated for both trading partners, whether they be individual countries or regions and trade blocks.

## 4 CONCLUSIONS

From this paper, a wide, though not necessarily complete, range of methodological approaches is made available to researchers on gender and trade. Of course, not everything can be done at the same time. In order to facilitate a feasible selection of methodologies, choices need to be made in two dimensions: methodological approaches and empirical approaches – both are summarized below.

### 4.1 Methodological approaches

The choice here is between the five options presented in section III:

- market equilibrium approach employing complex macroeconomic models (CGE), or single gravity equations
- structuralist approach, employing a combination of quantitative and qualitative analysis, emphasising the quantitative method of structuralist modelling

---

<sup>6</sup> In the literature  $W^f/W_m$  is often referred to as the gender wage gap. But formally it should be  $(1 - W^f/W^m)$  referring to the gap, while  $W^f/W^m$  refers to the ratio of female wages over male wages.

- golden straightjacket approach, emphasising policy analysis, which combines quantitative and qualitative analysis
- value chain approach, emphasising qualitative analysis, but requiring some quantitative back-up
- trade elasticities approach.

## **4.2 Empirical approaches**

The empirical choice is largely about how to group countries, for which several suggestions have been done:

- outcome based, either grouping on similar outcomes of trade variables, or similar outcomes of gender variables
- policy and/or institution based, grouping according to similar trade or social policies, or institutional setting (labour market institutions, gender equality enforcement, social or cultural structure) or patterns (trade relationships and partners, or trade blocks).

This paper has offered only a very sketchy summary of possible methodologies for the analysis of the two-way relationship between gender relations on the one hand and trade and financial liberalization on the other hand. The proof of the pudding is in the eating, and since there is very little research done yet, my hope is that this overview may stimulate researchers to engage with this area of research – the promises of the 1995 UN Women’s conference in Beijing and the 2000 Millennium Development Goals need to be achieved, and international trade and finance is one area in which this may be done.

## REFERENCES

- Anderson, James, and Eric van Wincoop (2003) 'Gravity with Gravititas: A Solution to the Border Puzzle', *American Economic Review* 93 (1), pp. 170-192.
- Badgett, Lee and Nancy Folbre (1999) 'Assigning Care: Gender Norms and Economic Outcomes', *International Labour Review* 138 (3), pp. 311-326.
- Bakker, Isabella (1994) *The Strategic Silence. Gender and Economic Policy*. London: Zed Books
- Balakrishnan, Radhika (2002) *The Hidden Assembly Line. Gender Dynamics of Subcontracted Work in a Global Economy*. Bloomfield: Kumarian Press.
- Balakrishnan, Radhika and Asad Sayeed (2002) 'Subcontracting: The Push-Pull Factor', in Radhika Balakrishnan (ed.) *The Hidden Assembly Line. Gender Dynamics of Subcontracted Work in a Global Economy*. Bloomfield: Kumarian Press.
- Barrientos, Stephanie, Catherine Dolan, and Anne Tallontire (2003) 'Gendered Value Chain Approach to Codes of Conduct in African Horticulture', *World-Development* 31(9), pp. 1511-26.
- Beneria, Lourdes, and S. Feltman (eds.) (1992) *Unequal Burden: Economic Crises, Persistent Poverty and Women's Work*. Boulder: Westview Press.
- Bhagwati, Jagdish (2004) *In Defense of Globalisation*. Oxford: Oxford University Press.
- Blau, Francine, and Lawrence Kahn (2003) 'Understanding International Differences in the Gender Pay Gap', *Journal of Labour Economics* 21 (1), pp. 106-144.
- Çağatay, Nilüfer, Diane Elson, and Caren Grown (1995) 'Introduction', *World Development*, Vol. 23, No. 11, pp.1827-36.
- Çağatay, Nilüfer, Diane Elson, and Caren Grown (2000) 'Introduction', *World Development*, Vol. 28, No. 7, pp.1145-56.
- Carr, Marilyn and Martha Chen (2004) 'Globalization, Social Exclusion, and Gender', *International Labour Review* 143 (1-2), pp. 129-160.
- Chang, Ha-Joon (2002) *Kicking Away the Ladder. Development Strategy in Historical Perspective*. London: Anthem.
- Cowling, K. and R. Sugden (1993) 'Control, Markets and Firms', in C. Petelis (ed.), *Transaction Costs, Markets and Hierarchies*, Oxford: Basil Blackwell: 66-76.
- Darity, William (1995) "The Formal Structure of a gender-Segregated Low-Income Economy", *World Development* 23 (11): 1963-1968.
- DeMartino, George (2000) *Global Economy, Global Justice. Theoretical Objections and Policy Alternatives to Neoliberalism*. London: Routledge.
- Elson, Diane (1995) *Male Bias in Economic Development*. Manchester: University of Manchester Press.

- Elson, Diane (1998) ‘Sector Programme Support’. A collection of papers published by the Graduate School of Social Sciences, Genecon Unit. Manchester: University of Manchester (for OECD/DAC – WID).
- Elson, Diane and Nilufer Çağatay (2000) ‘The Social Context of Macroeconomic Policies’, *World Development*, vol. 28, no. 7, pp. 1347-64.
- England, Paula, Michelle Budig and Nancy Folbre (2002) ‘Wages of Virtue: the Relative Pay of Care Work’, *Social Problems* 49 (4), pp. 455-473.
- Erürk, Korküt, and Nilufer Çağatay (1995) “*Macroeconomic Consequences of Cyclical and Secular Changes in Feminization: an Experiment at Gendered Macromodelling*”, *World Development* 23 (11): 1969-1977.
- Espino, Alma, and Irene van Staveren (2001) *Instruments for Gender Equality in Trade Agreements – European Union – Mercosur – Mexico*. Brussels: WIDE.
- Folbre, Nancy (1994) *Who Pays for the Kids? Gender and the Structures of Constraint*, London: Routledge.
- Folbre, Nancy (1995) ‘Holding Hands at Midnight: the Paradox of Caring Labour’, *Feminist Economics* 1 (1), pp. 73-92.
- Fontana, Marzia (2002) ‘Modelling the Effects of Trade on Women, at Work and at Home: a Comparative Perspective’, Washington D.C.: IFPRI. Paper presented at the Workshop on Methodological Tools for Assessing the Sustainability Impact of EU’s Trade Policies, EU-CEPII, Brussels, 7-8 November, 2002.
- Fontana, Marzia and Adrian Wood (2000) “*Modelling the Effects of Trade on Women, at Work and at Home*”, *World Development* 28 (7): 1173-1190.
- Frankel, Jeffrey, Ernesto Stein and Shang-Jin Wei (1998) ‘Continental Trading Blocks: Are They Natural or Supernatural?’ in J.A. Frankel (ed.) *The Regionalization of the World Economy*. Chicago: University of Chicago Press, pp. 91-113.
- Gereffi, G. (1999) ‘International Trade And Industrial Upgrading In The Apparel Commodity Chain’, *Journal of International Economics*, Vol.48 (1), pp.37-70.
- Goldschmidt-Clermond, Luisella and Elizabeth Pagnossin-Aligisakis (1995) *Measures of Unrecorded Economic Activities in Fourteen Countries*. New York: UNDP. Occasional Paper no. 20.
- Grabel, Ilene (2000) ‘Identifying Risks, Preventing Crisis: Lessons from the Asian Crisis’, *Journal of Economic Issues* 34 (2), pp. 377-383.
- Grown, Caren, Diane Elson and Nilufer Çağatay (2000) ‘Introduction’, *World Development*, 28 (7), pp. 1145-1156. Introduction to a Special Issue on ‘Growth, Trade, Finance, and Gender Inequality’.
- Hertz, Noreena (2001) *The Silent Takeover. Global Capitalism and the Death of Democracy*. London: Heinemann.

- Himmelweit, Sue (2003) "An Evolutionary Approach to Feminist Economics", in Drucilla Barker and Edith Kuiper (eds.) *Toward a Feminist Philosophy of Economics*. London: Routledge: 247-265.
- Hobday, M. (1995) East Asian Latecomer Firms: Learning the Technology of Electronics, *World Development*, 23 (7), pp. 1171-1193.
- Houston, Ellen (2005) 'Does Gender Wage Inequality Impact on Trade Performance? Introducing Gender into the Neo-Schumpeterian Trade Model'. Paper presented at an URPE session at the ASSA meetings in Philadelphia, January 7-9.
- Inglehart, Ronald and Pippa Norris (2003) *Rising Tide: Gender Equality and Cultural Change Around the World*. Cambridge: Cambridge University Press.
- Klein, Naomi (2001) *No Logo*. London: Flamingo.
- Knorringa, Peter, and Irene van Staveren (2005) Operationalising Social Capital in Marginalised Developing Countries', Report for UNIDO. The Hague: ISS.
- Leamer, Edward (1999) 'Competition in Tradables and a Driving Force of Rising Income Inequality', in Horst Siebert (ed.) *Globalisation and Labour*. Tubingen: Mohr Siebeck, pp. 119-152.
- McDowell, L. and G. Court (1994) 'Gender Divisions of Labour in the Post-Fordist Economy: The Maintenance of Occupational Sex Segregation in the Financial Services Sector', *Environment and Planning A*, vol. 26, no. 9 (September), pp. 1397-1418.
- Morduch, Jonathan (1999) 'The Microfinance Promise' in *Journal of Economic Literature* 37 (4), pp. 1569-1614.
- Moser, Caroline (1989) 'The Impact of Recession and Adjustment Policies at the Micro Level: Low Income Women and Their Households in Guayaquil, Ecuador' in UNICEF, *The Invisible Adjustment. Poor Women and the Economic Crisis*. Second Revised Edition. Santiago: UNICEF, pp. 137-166.
- Nelson, Julie (1999) 'Of Markets and Martyrs: Is it OK to Pay Well for Care?', *Feminist Economics* 5 (3), pp. 43-59.
- Nelson, Julie and Paula England (2002) Feminist Philosophies of Love and Work. Special Issue of *Hypatia* (17: 2).
- Palley, Thomas (2004) 'The Economic Case for International Labour Standards', *Cambridge Journal of Economics* 28, pp. 21-36.
- Pearson, Ruth (1997) 'Global Change and Insecurity. Are Women the Problem or the Solution?' in Isa Baud and Ines Smyth (eds.) *Searching for Security. Women's Responses to Economic Transformations*. London: Routledge, pp. 10-23.
- Picchio, Antonella (ed.) (2003) *Unpaid Work and the Economy. A Gender Analysis of the Standards of Living*. London: Routledge.

- Pieper, Ute (2000) 'Deindustrialisation and the Social and Economic Sustainability Nexus in Developing Countries: Cross-Country Evidence on Productivity and Employment', *Journal of Development Studies* 36 (4), pp. 66-99.
- Pitt, Mark and Shahidur Khandker (1998) 'The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of Participants Matter?' in *Journal of Political Economy*, 106 (5), pp. 958-996.
- Plantenga, Janneke (2002) 'Combining Work and Care in the Polder Model: an Assessment of the Dutch Part-Time Strategy', *Critical Social Policy* 22 (1), (70), pp. 53-71.
- Raso-Delgue, Juan (2003) 'Industrial Relations and Global Labour Standards in the Experience of Mercosur', paper presented at the IIRA World Congress, The Hague, September
- Rodrik, Dani (2002) 'Globalization for Whom?' *Harvard Magazine*, July-August. To be found at <http://harvard-magazine.com/on-line/070280.html>
- Seguino, Stephanie (2000) 'Gender Inequality and Economic Growth: A Cross-Country Analysis', *World Development*, 28 (7), pp. 1211-1230.
- Sen, Amartya (1987) *On Ethics and Economics*. Oxford: Blackwell.
- Singh, Ajit and Ann Zammit (2000) 'International Capital Flows: Identifying the Gender Dimension', *World Development*, 28 (7), pp. 1249-1268.
- Standing, Guy (1999) 'Global Feminisation: Through Flexible Labour: a Theme Revisited', *World Development*, Vol.27, No.3, pp.583-602.
- Staveren, Irene van (1997) 'Focus Groups: Contributing to a Gender-Aware Methodology' in *Feminist Economics*, (3) 2 , pp. 131-5.
- Staveren, Irene van (2001) *The Values of Economics. An Aristotelian Perspective*, London: Routledge.
- Staveren, Irene van (2002a) 'Social Capital: What is In it for Feminist Economics?', ISS Working Paper no. 368, 2002.
- Staveren, Irene van (2002b) 'Global Finance and Gender', in Jan Aart Scholte and Albrecht Schnabel (eds.) *Civil Society and Global Finance*. London: Routledge, pp. 228-246.
- Staveren, Irene van (2003) 'Monitoring Gender Impacts of Trade', *European Journal of Development Research* 15 (1), 2003, pp. 126-145.
- Staveren, Irene van (2004) Learning from Modelling Care. Paper presented at the IAFFE Annual Conference, 17-19 August, Oxford.
- Staveren, Irene van (2005) 'Modelling Unpaid work and Care', forthcoming in the *Review of Social Economy*.
- Tronto, Joan (1993) *Moral Boundaries. A Political Argument for an Ethic of Care*. London: Routledge.
- UNDP (1995) Human Development Report 1995. Oxford: Oxford University Press.

- UNDP (2004) *Human Development Report 2004*. Oxford: Oxford University Press.
- Warner, James, and D.A. Campbell (2000) “*Supply Response in an Agrarian Economy with Non-Symmetric Gender Relations*”, *World Development* 28 (7): 1327-1340.
- Women’s World Banking (1996) <http://www.soc.titech.ac.jp/icm/wind/wwb-report.html>
- World Bank (1999) *Gender, Growth, and Poverty Reduction. Special Program of Assistance for Africa, 1998 Status Report on Poverty in Sub-Saharan Africa*. Technical Paper no. 428. Washington D.C.: World Bank.
- Yotopoulos, Pan and Sagrario Floro (1992) ‘Income Distribution, Transaction Costs and Market Fragmentation in Informal Credit Markets’ in *Cambridge Journal of Economics*, 16, pp. 303-326.