

Geography, Structural Change and Development

Introduction

In his 1971 Nobel lecture Simon Kuznets (*AER*, 1973, n.5) defined “modern economic growth” a process based both on technological progress and related institutional change. He then identified six main “stylized facts” which characterise quantitatively modern economic growth. Two of these features relate to aggregate rates, that is, the growth rate of income and the rise in productivity; two relate to structural transformation, that is, sectoral and societal change; and two relate to international diffusion, that is, the improvements in transport and communication and the uneven spread of economic development.

Remarkably, the main object of investigation of the abstracts assigned to this project refers to: 1) the impact of geographical factors and location on growth; 2) the process of structural change of economies and the role of dualism in development; 3) international trade and specialization. Moreover, other issues of economic development such as the role of technological progress and productivity change, improvements in communication and transport, the process of convergence and the role of institutions are dealt with in detail within subgroups of abstracts. In particular, the role of economic change (technological or structural change or in the location of the productive activity) is a theme which runs through all of them.

We grouped the abstracts in three headings (whose names are temporary): 1) LOCATION/GEOGRAPHICAL FACTORS; 2) STRUCTURAL CHANGE; 3) INTERNATIONAL TRADE AND SPECIALISATION.

The first set of abstracts dealing with location and geographical factors (with a stress on the role of economic policy) are COMMENDATORE & PETRAGLIA, TALAMO, LO TURCO, and PRESBITERIO.

COMMENDATORE & PETRAGLIA propose a model in which industrial location and growth are both endogenous and in which the government sector plays a crucial role.

In TALAMO's abstract the topic is the FDI and the theoretical framework is the gravity model. Talamo intends to clarify the role of a country's institutional factors (and in particular of their quality) on its ability to attract foreign investors.

LO TURCO aims to empirically evaluate the relation between regional trade agreements, industrial location and per capita income inequality across countries.

The objective of PRESBITERIO is similar, since he aims to empirically investigate direct and indirect effects of geographical factors (related to the physical location of a country) on economic development.

The second set of abstracts dealing with structural change are CAPASSO & CARRILLO, BILANCINI & D'ALESSANDRO, GUALERZI, and DI GUILMI & NAPOLETANO.

CAPASSO & CARRILLO propose to frame a dual economy in an endogenous growth model. Their objective is to analyse and reinterpret the process of convergence between economies (North and South of Italy), if there is any, in the light of the traditional theory of dualism.

BILANCINI & D'ALESSANDRO propose to model a two sector-economy (agriculture and manufacture) in the attempt to clarify how productivity changes in agriculture may affect the process of industrialisation (intended as an endogenous switch in manufacture to an increasing returns technology) via changes in income distribution.

GUALERZI intends to clarify with an empirical analysis 1) how variations in the level of investment in the US ICT sector, before and after the burst of the speculative bubble in 2000, affected the structural evolution of that sector; 2) how such an evolution in turn impinged upon the structural transformation of other sectors strictly linked to the diffusion of knowledge.

Finally, DI GUILMI & NAPOLETANO investigate the role played by firms' financial heterogeneity in casting productivity and growth dynamics, also providing indirect evidence of the structural change patterns undergoing the aggregate pace of the economy in the long run.

The third set of abstracts, dealing with international trade specialisation and economic growth, are MARIUTTI, GUARINI, TAMBERI et al. CUTRINI.

MARIUTTI aims to build a model of multi-sectoral (and multi-country) model of structural change à la Pasinetti in which the possibility of international trade is explicitly taken into account.

GUARINI proposes an empirical work in order to investigate which factors affect the change in labour productivity and if and how European countries adjusted their productive structure to the accelerating process of international competition by increasing the weight innovation and technological progress. The theoretical underpinnings of Guarini empirical investigation are the classical-post-Keynesian Smith-Verdoorn-Kaldor law and the Sylos-Labini technological capability approach.

TAMBERI et al. aim to investigate empirically the long-run relationship between international trade (and productive) specialisation and economic growth, in order to highlight if and how specific patterns of specialization foster (or bound) the path of economic growth.

Looking at the EU, CUTRINI aims to investigate the empirical relationship between growth and regional specialization, taking into account some institutional and geographical aspects such as the degree of urbanization, the quality of the transport infrastructure and the degree of trade integration in the European markets.

Follow scheme of the project and abstracts

PROPOSTA:

Geography, structural change and development

Distinzione nella metodologia (Lavori Teorici/Empirici)

1. Lavori prevalentemente teorici; 2. Lavori prevalentemente empirici.

Section 1 - LOCATION/GEOGRAPHICAL FACTORS

1. Commendatore-Petraglia (1): "The government sector as a propeller of growth in a New Economic Geography model"
2. Talamo (1): "Institutions, FDI and the Gravity Model"
3. Lo Turco: (2) "G1-RTAs Industrial Location and Convergence"
4. Presbiterio (2): "A Note on Geography and Economic Development"

Section 2 - STRUCTURAL CHANGE

5. Carrillo-Capasso (1): "Mezzogiorno d'Italia: A New Theory of Dual Economy to reinterpret and old issue"
6. Bilancini-D'Alessandro (1) "Functional Distribution and Industrial Takeoff: The Role of Wages and Natural Resources"
7. Gualerzi (2): "Crescita, investimento e settori a alto contenuto di conoscenza"
8. Corrado Di Guilmi e Mauro Napoletano (2): "Structural Change and Firms' Financial Structure: Some New Evidence"

Section 3 - INTERNATIONAL TRADE / SPECIALIZZAZIONE INTERNAZIONALE

9. Mariutti (1): "Production of commodities by means of labour – A theory on international relations"
10. Guarini (2): "Una valutazione della crescita della produttività del lavoro nei paesi europei (o OCSE)"
11. Tamberi-Lo Turco-Presbiterio (2): "Modelli di Specializzazione e crescita"
12. Cutrini (2): "Integrazione economica europea, specializzazione e convergenza regionale"

SEZIONE 1 - LOCATION/GEOGRAPHICAL FACTORS

13) Commendatore-Petraglia (1)

“The government sector as a propeller of growth in a New Economic Geography model”

Pasquale Commendatore and Carmelo Petraglia*

The impact on economic analysis of New Economic Geography paradigm, inspired by Krugman (1991), has already been extensive. The new paradigm integrates urban, regional and international economics in a single theoretical framework and, more generally, remedies the omission of space from mainstream economics.

NEG theory has identified three main forces as determinants of the agglomerative processes: factor mobility, economies of scale and transportation costs. A different interplay of these determinants will become relevant to firms' decision to locate production activities. In particular lower transportation costs, larger economies of scale and free factors mobility will lead to higher concentration of firms in a region.

A natural area of research is the role of public policy in determining agglomeration or dispersion of productive activities. Several works have dealt with taxes in NEG models (see for example Baldwin and Krugman, 2004; Baldwin et al., 2003). These contributions challenged the standard wisdom on tax competition and tax harmonization, according to which the standard result of tax competition is a race to the bottom between countries. Following their analysis, the presence of agglomeration rents allows a core country to both retain its industry and apply a higher tax rate exploiting agglomeration rents.

The role played by public spending in affecting firms' locational choice is gaining increasing attention within the NEG approach. The interest of scholars, however, has been mainly devoted to the study of how higher productive public spending – expenditure in infrastructure – can favor the agglomeration of new firms due to induced beneficial effects on production costs and on the productivity of the mobile factor.

These contributions share the common feature that countries not only compete through tax competition but also through public expenditures; what emerges from these works is that both taxation and public expenditures may affect spatial concentration of the industry acting in opposite directions. It follows that if governments want to retain (or acquire) the industrial core they have to choose the most suitable policy mix.

A less investigated issue pertains the effects of public spending on capital accumulation and, hence, on growth. Moreover, the issue of the alternative uses of public spending and taxation has been neglected.

A combination of endogenous growth theory and the NEG approach has been proposed by Martin (1999) and Martin and Ottaviano (1999 and 2001). As a major result, the effect of endogenous growth is the emergence of multiple equilibria with production taking place in both regions. That is to say that the Krugman (1991) “circular causation” process is not operational. Martin (1999)

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highlights the existence of a trade-off between growth and the spatial distribution of economic activities. An improvement in infrastructures that reduces transaction costs *inside* the poorest region, leads to a decrease in both the spatial concentration of industries and the growth rate. Conversely, an improvement in infrastructure facilitating transactions *between* regions has the reverse effect. In Martin's (1999) paper, public policies are financed via money transfers from the richer country to the poorer country.

Our paper aims to analyze the linkage between public spending, taxation, long-run growth and income distribution – both among and within countries – within the New Economic Geography (NEG) approach. In order to do so, we will try to reconcile recent insights on the impact of public infrastructure on firms' locational choices developed within the NEG literature (Martin and Rogers, 1995; Martin, 1999; Brakman et al. 2002) with the traditional view in the endogenous growth literature (Barro 1990) on long-run growth effects induced by alternative compositions of public spending (in consumption and investment goods). That is, in a model where the government budget is in equilibrium, whereas public spending in infrastructure may foster growth, increasing public consumption reduces unambiguously capital accumulation.

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Keywords: Public Policy, New Economic Geography, Economic Growth

31) Lo Turco (2)

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G1-RTAs industrial Location and Convergence
Abstract

Aim of this paper is to empirically evaluate the relation between regional trade agreements, industrial location and inequality.

Location of production is determined by country specific features, such as factor endowments, policy framework, technological advance and the size of the internal market. Though, having care only to country specific characteristics would not allow to explain why countries with a similar starting factor endowment, often show different production structures: *ceteris paribus*, some countries show higher shares of industrial production than others. This can be referred to the existence of industry specific characteristics which, together with geography, cause agglomeration forces to operate. In this sense, the presence of trade or transport costs, economies of scale and backward and forward linkages can cause production to concentrate in a few locations and only by time, when wages become unsustainable, let it spread to lower wage economies. Thus, as Puga and Venables (1998) point out, "growth in world manufacturing relative to other tradable industries does not lead to a steady development of low wage economies, but instead to rapid industrialization of countries in turn". While Puga and Venables(1998) focus on the role of developing countries unilateral trade policy for industrial development, Venables(2002) analyzes the effect of the negotiation of a Customs Union(CU) on industrial development both in symmetrical(South-South, North-North) and asymmetrical agreements. The idea is that preferential tariffs would affect production location via their effect on the structure of regional comparative advantages. The change in regional comparative advantage together with the above mentioned country and industry characteristics then determine income and production patterns. The main implication is that, via their effect on partners' comparative advantages, symmetric integration schemes bring about an unequal industrial location and, eventually, divergence in income levels, while asymmetric RTAs cause income convergence.

From an empirical point of view it is important to highlight how the regional integration process together with a pre-existing different trade specialization among partners can affect the location of production and to compare industrial structures in symmetric and asymmetric integration schemes. Lo Turco(2005), partially explores the relation between regional partners' trade specialization patterns, localization of industry and inequality across Latin American sub-regions, especially the Andean Community and the Central American Common Market, before and after the negotiations of the early 90s.

In line with this strand of research, the paper is an empirical work and represents an improvement on the existing literature in that it more deeply deals with the construction of measures of integration directed to specifically test theory predictions. Furthermore, the availability of higher quality industry-level data will allow for better panel data estimation techniques. Finally, while the main focus remains the Latin American region and especially the Mercosur sub-region the paper will be addressed at compare patterns of industrial location in North-South and North-North agreements too, e.g NAFTA and the EU.

The first part of the work will be devoted to the construction of measures of integration, starting from simple measures of revealed comparative advantage and tariffs. Part of this section will be devoted to the analysis of within agreement trade patterns in order to highlight how and if trade patterns among partners have changed after the formation of the RTA. Subsequently an empirical

model will be estimated with the precise aim to put at a trial both the measures of integration obtained in the first part and the typical factors which usually affect industry location. The second part of the work, instead, will be based on the detection of the impact of trade agreements on overall inequality using aggregated country data on real GDP per capita.

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Keywords:

RTAs, Industrial Location, Convergence, Dynamic Panel Data Models.

33) Andrea Presbiterio (2)

A Note on Geography and Economic Development

*Andrea F. Presbiterio*¹

The aim of this paper is a further analysis of the direct and indirect effects of geographical factors on economic development. Moving from a previous paper (Presbitero, 2006), I would like to check the validity of those results using different measures of institutional quality and different econometric techniques.

The basic idea is that current differences in the level of income and well-being across countries are due to different causes, which are related to the institutional framework and to geographical factors. In this context, therefore, geography is not strictly related to its economic meaning, but more to the physical location of a country, which affects its health environment, its ecology and its predisposition to trade. In other words, the point is that being located in the tropics instead of central Europe is a disadvantage because of market access, tropical diseases, and other ecological factors that impact on labour and land productivity as well as on human well being.

Furthermore, following Acemoglu *et al.* (2001), geographical factors affected the early settlers' behaviour and, therefore, they shaped the development of good or bad institutions. The relevance of institutions for economic growth and development is today widely accepted and it is built on the grounds of the seminal work by Douglas North (1990) about the difference between British and Spanish institutions, with the former that are believed to be more favorable to economic growth. This explains the relative success of the former British colonies in North America, with respect to the Latin American countries which were influenced by the Spanish and by other European institutions.

According to this approach (see, among others, Rodrick, Subramanian and Trebbi, 2002; Easterly and Levine, 2002) geographical factors shaped the development and the quality of institutions, so that their effect on economic development is indirect.

Nonetheless, some authors (Diamond, Sachs) suggest that the environment has other direct effect on economic development, because of health conditions (countries more subject to tropical diseases face more severe constraints) and market access.

In a previous paper (Presbitero, 2006) I find evidence from a cross country regression, using instrumental variables, that geographical factors (measured as malaria endemic) have a direct impact on economic development (measured as GDP per capita), apart from its impact on institutional quality.

Here, the aim is twofold: a first work is a simple robustness check, based on the availability of new indicators and econometric techniques, while the second goal is broadening the analysis, looking at different measure of development and including the aspect of trade into the analysis.

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For what concerns the methodology, it is possible to run the cross country regression using the Identification through Heteroscedasticity method (Rigobon, 2004), to check the validity of results obtained using the standard Instrumental Variable (GMM) technique.

The availability of more institutional indicators (ICGR detailed data from 1984 to 2004 and World Bank's CPIA ratings from 1977 to 2004), a corrected series of mortality rates of early settlers and some new indicators of trade openness (Economic Freedom Network) could be used to check the robustness of previous findings and to broaden the model specification in order to explicitly include the role played by market access as another geographical factor, other than the health environment. With respect to the dependant variable, I would like not to focus exclusively on GDP as measure of economic development, but to look also at other aspects, like inequality (measured by Gini), the Human Development Index (HDI, from the World Bank) and other poverty and deprivation measures, not only related to monetary indicators. In that way, it should be possible to stress the relevance of geographical factors, related to location and ecology, for human development and well-being.

From a policy perspective, this kind of empirical analysis could provide sound evidence in favour of development policies that aim to improve health conditions (i.e. fighting malaria and other tropical diseases) in poor countries, especially in Sub-Saharan African countries. The recent debate on the production of vaccines for tropical disease is a key aspect for the achievement of the Millennium Development Goals, for which a stronger commitment by donors is required.

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JEL classification: C31, O10, O11, P16

Keywords: Economic development, Institutions, Geography.

Talamo (1)

- A. The Gravity Model and its Origins**
- B. Forms, Applications and Econometric Properties of the Gravity Model**

1. DESCRIZIONE TEMA GENERALE:

Over the recent past, the importance of international trade and foreign direct investment flows (FDI) has been increasing at an exponential rate. In the light of these developments, a large number of papers have attempted to analyse the nature of international flows of goods and capital. Recently, a popular and empirically successful stream of research has built on the gravity model to investigate bilateral trade flows across a large number of countries.

According to the gravity model of international trade, the amount of trade flows between two countries is assumed to increase in their sizes (GDP or Population), and decrease in the cost of transport, as measured by their geographical distance. Furthermore, several other variables have been introduced in the basic gravity equation to control for linguistic, cultural and historical similarities, regional integration, common financial development, quality of institutions, common currency, and trade agreements. In the traditional gravity model, trade is expected to be positively influenced by the countries' sizes, common language, the presence of trade agreements, and geographical proximity (indicated by variables such as common border). On the other hand, bilateral trade flows are expected to be negatively correlated with geographical distance, which is considered as a proxy for trade costs or informational asymmetries.

Recently, the gravity approach has been used to model the international pattern of foreign direct investment flows, as an evolution to the literature on trade. When considering foreign direct investment flows we expect to find that, other things equal, an increase in the host countries' size leads to an increase in FDI flows. Common language, the presence of trade agreements, adjacency have a positive impact on FDI. The correct sign of the coefficient of distance is more open to debate.

One important characteristic of the gravity model is the possibility of introducing several independent variables such as quality of domestic institutions, level of education, political instability, transparency, quality of the legal system, control of corruption, level of freedom and civil rights. In particular, after the Asian financial crisis, commentators have focused their attention on these factors as important determinants of international trade and foreign direct investment location. Recent empirical studies suggest that the quality of domestic governance has a quantitatively

important impact on a country's ability to attract foreign investors, who prefer to invest in countries with better governance. Indeed, host countries could compete by improving the quality of their institutions, their labour force, their infrastructures, their investment climate, the level of corporate tax, the quality of corporate governance practices and systems. In general, a better domestic quality of governance should be associated with more efficient financial integration and positive spillovers to the receiving countries.

2. **NATURA METODOLOGICA:**

A. The Gravity Model and its Origins

B. Forms, Applications and Econometric Properties of the Gravity Model

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4. **PAROLE CHIAVE:** Gravity model, Trade, Foreign Direct Investment, Institutional Variables.

SEZIONE 2- STRUCTURAL CHANGE

23) Carrillo-Capasso (1)

Mezzogiorno d'Italia: A New Theory of Dual Economy to reinterpret and old issue
S. Capasso, M.R. Carillo - University of Naples "Parthenope"

The main objective of the paper is to analyse and reinterpret the process of convergence between economies, if there is any, in the light of the traditional theory of dualism. The main idea is that the traditional framework of a dual economy à-la-Lewis, engineered in an endogenous growth model, can add significant insights to the analysis of the dynamics of growth. Indeed, by focusing on the issue of structural change and market imperfections a dual economy model can explain specific features of poverty traps and non convergent capital accumulation paths which a standard endogenous growth framework cannot fully explain. In a recent work Caselli and Coleman JPE 01 interpret the process of convergence of U.S. regions (the catching up of the Midwest to the Northeast) by means of the structural transformation within each regions. The process of adjustment is quite simple and very much dualistic in its dynamics. Decreasing education/training costs favour the transfer of unskilled labour force, initially employed in the agricultural sector of the southern regions, in the manufacturing sector of northern regions. Specialisation and increasing productivity in each regions lead to convergence in the average income level and average wage rate across industries and sectors. Adopting similar arguments, Gollin, Parente and Rogerson 02, Temple MS 05, and Temple and Graham 04 find that development and growth can be explained by means of a process of structural transformation for which a decreasing share of agriculture output in the economy leaves space to the increasing role for manufacturing and industry. The process can only start if there is a sufficient initial increase in agriculture productivity which allows sustaining the increasing manufacturing labour force. The model implies the asymptotic disappearance of dualism and convergence to a one-sector economy. Though these recent developments of the theory, the features of the dynamics of some economies and the emergence of poverty traps, remain partially unexplained. Moving from this literature, we analyse the issue of *convergence* with the goal to find a general theoretical framework which could explain an old question: the Italian Mezzogiorno's delayed development.

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7) Ennio Bilancini and Simone D'Alessandro:

“Functional Distribution and Industrial Takeoff: The Role of Wages and Natural Resources”

ABSTRACT

We study a stylized economy composed of two sectors, agriculture and manufacturing. The former produces a single subsistence good while the latter is constituted of a continuum of markets producing distinct commodities. Following Murphy et al. (1989) we model industrialization as the introduction of an increasing returns technology in place of a constant returns one. In particular, we take in to account a modified version of this model provided by Bilancini and D'Alessandro (2005) which introduces the functional distribution of income among groups' membership (landowners, capitalists, workers). We develop this framework towards two lines of research.

The first one analyses the effect of the increase of agricultural productivity on income and industrialization stressing the role of the distribution of the generated agricultural surplus between landowners and workers. Given hierarchical preferences of individuals and the structure of manufacturing sector the distribution of the surplus in favour of workers or of landowners affects the equilibrium level of income and industrialization. The role of productivity improvements and their persistent effects of structural change and growth is the central issue analysed for decades by development economists (Lewis, 1967).

The second line tries to include in the model some specific characteristics of natural resources in order to compare our results with those of the literature on the curse of natural resources (Sachs and Warner, 1999). This (part of the) work should take into consideration an open economy. To put it in a nutshell, the idea is to compare the effects on income and growth of the inclusion of natural resource in the tradable goods.

La natura del lavoro è strettamente teorica, si propone un modello che vuole ridiscutere alcuni risultati standard dei modelli ad economia duale.

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Parole chiave: Functional Distribution, Industrial Takeoff, Hierarchical Preferences, Structural Change.

19.3) Gualerzi (2.2)

Crescita, investimento e settori a alto contenuto di conoscenza

1) descrizione del tema, cercando di sottolineare la relazione con il tema generale della sezione

Il lavoro si propone un'analisi della spesa per investimenti nel settore Information and Communication Technologies (ICT) prima e dopo la bolla speculativa del 2000. Si propone quindi un'analisi disaggregata della spesa per investimenti prima e dopo il 2000, in relazione alle fluttuazioni della crescita economica negli Stati Uniti. Questa analisi dovrebbe mettere in luce l'evoluzione strutturale del settore ICT e i legami con la ricerca di base, la spesa in R&D, la strategia tecnologica delle imprese e la politica tecnologica del Governo Usa.

Il secondo tema è quello della trasformazione delle industrie che sono maggiormente interessate dall'innovazione resa possibile dallo sviluppo dell'ICT, in primo luogo le industrie che manipolano informazione, dal settore culturale a quello della produzione di sapere. Questo in relazione allo studio dell'impatto economico di Internet, con attenzione particolare al dibattito sugli effetti complessivi su produttività e cambiamento strutturale, ai fenomeni di increasing e decreasing returns, alle condizioni tecniche e sociali di sviluppo dei networks.

Il risultato dovrebbe essere un'analisi della trasformazione strutturale indotta dallo sviluppo dell'ICT in un specifico periodo di crescita dell'economia degli Stati Uniti. Questo contribuisce a chiarire il processo di trasformazione strutturale che sta alla base della leadership degli Stati Uniti nei settori a alto contenuto di conoscenza, e quindi la questione della geografia della specializzazione produttiva internazionale.

2) natura metodologica del lavoro

L'interesse è principalmente per un'analisi empirica, da condurre su materiale statistico, e/o aziendale e con ricerca su campo, con interviste a imprenditori e studiosi. La ricerca empirica si avvale tuttavia di un parte teorico-concettuale tesa a chiarire il problema dell'investimento nell'analisi della crescita come premessa di fondo e strumento per guidare la ricerca empirica. Infine un ruolo importante avrà una consultazione mirata della letteratura sul settore ICT e sul suo sviluppo negli Stati Uniti.

3) bibliografia

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4) tre-quattro parole chiave

Crescita, Investimento, ICT, settori a alto conoscenza, Economia Usa, anni 90.

26) Corrado Di Guilmi e Mauro Napoletano: **"Structural Change and Firms' Financial Structure: Some New Evidence"** (C4)

ABSTRACT

In this work we investigate the role played by firms' financial heterogeneity in casting productivity and growth dynamics. On the one hand, much of the literature on productivity dynamics has highlighted the importance of structural change - in terms of the coupled evolution between within firms productivity levels and firms size dynamics - for explaining the pace of aggregate productivity (see e.g. [2] for a survey). However, this literature has paid so far few attention to the determinants of such patterns, notwithstanding the hints coming from the theoretical literature on the subject, in particular those enrolled in the evolutionary strand of thought (see e.g. [7] for a seminal contribution). On the other hand, the recent literature on finance and growth (e.g. [8] and [9]) has pointed to the importance played by the financial structure of firms in determining their real performance. Nevertheless, this literature has carried over the analysis mostly through pooled regressions of productivity and firms size measures on various financial indicators, neglecting the analysis of the impact of financial structure on the characteristics of the whole firm size and productivity distributions (e.g. on higher moments of those distributions), and paying few or no attention to structural change issues, e.g. like those implied by joint dynamics of productivity and size. We improve upon the foregoing strands of literature, by exploring the role played by the firms financial structure as a possible underpinning of the coupled dynamics between firms size and productivity. More precisely, relying on a large micro data set of U.S. quoted firms, we study the statistical properties of firms' size (see e.g. [1] and [5]), growth and productivity distributions conditioned upon key financial indicators (e.g. the equity ratio, see [6]). Moreover, we study how the moments of these conditioned distribution co-move with indicators summarizing the aggregate behaviour of the economy (e.g. the low frequency component of gdp growth rates). In this way, we grasp whether the relation between finance and productivity, and that between finance and firm growth are affected or not by the overall dynamics of the economy. In addition, we provide indirect evidence of the structural change patterns undergoing the aggregate pace of the economy in the long run.

KEYWORDS:

Productivity Distribution, Firms-Size Distribution, Financial Structure, Structural Change, Aggregate Growth.

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SEZIONE 3 - INTERNATIONAL TRADE / SPECIALIZZAZIONE INTERNAZIONALE

42) Luciano Boggio (1)

On the long-run effects of low-wage countries' growing competitiveness and exports of manufactures.

1) L'analisi teorica esistente, sia neoclassica che ricardiana, di fronte all'aumento rapido della produttività e delle esportazioni industriali nei paesi a bassi salari, sottolinea la possibilità che (anche) nel lungo periodo i paesi ricchi subiscano una perdita di benessere/reddito; ciò a causa del peggioramento dei terms of trade, del salario relativo e del rapporto tra salario e prezzo dei beni già importati.

Nel mio lavoro si riesamina il problema con un modello Ricardo-Mill (RM) a 2 paesi ed n beni, che viene poi modificato per tener conto delle caratteristiche dell'offerta di lavoro nei paesi a bassi salari.

Togliendo nel paese a bassi salari l'ipotesi di piena occupazione di un'offerta di lavoro fissa, propria del modello RM, costruisco due modelli alternativi.

- 1) Un'economia con "offerta di lavoro illimitata" nel senso di Lewis (1954), in cui il settore moderno (capitalista) può assumere "qualunque" ammontare di forza lavoro ad un salario fisso, basato sul livello di sussistenza, che prevale nel settore tradizionale.
- 2) Un "modello intermedio" in cui variazioni di occupazione nel settore moderno sono possibili, ma sono accompagnate da variazioni salariali nella stessa direzione.

Nel confronto tra i tre modelli, il paese ad alti salari ottiene

- l'effetto meno favorevole, forse negativo, nel modello RM,
- l'effetto più favorevole nel modello alla Lewis, dove non c'è più peggioramento del salario relativo,
- un effetto intermedio nel terzo modello.

Conclusioni: La possibilità di perdite di reddito reale appare molto meno certa che nella letteratura precedente; e, per quanto riguarda i lavori di impostazione ricardiana, di entità minore.

Il lavoro è già quasi finito.

Rispetto al tema generale della sezione, si tratta degli effetti di una modifica della *SPECIALIZZAZIONE INTERNAZIONALE* con ovvi legami coi temi dello sviluppo economico, della politica commerciale e della convergenza tra economie in via di sviluppo e sviluppate.

2) E' un' **analisi teorica** di statica comparata.

3) Bibliografia essenziale:

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4) Parole chiave: *INTERNATIONAL SPECIALIZATION* *CATCHING-UP*
GLOBALIZATION

50.2) Mariutti (1)

Production of commodities by means of labour – A theory on international relations

Abstract

Since (at least) Ricardo, international trade has been perceived as a positive-sum-game – any trading partner would be at the end better-off, no matter how bad (that is, how uncompetitive) was in autarchy. The principle of comparative advantages justifies precisely an argument of this kind: international specialization and free trade generate always a rise of income. What is wrong with this argument? Three points are worth discussing. First, it is theoretically based on some ad hoc assumptions, that do not match often reality: the assumption of full employment is the most evident, but not the only one. Second, it dismisses the point that some patterns of specialization may slow future growth, endangering dynamically the economic systems that have chosen to specialize in that way. Third, it focuses exclusively (or mainly) on the trade of goods, while little attention is paid on what occurs in other variables not directly connected with market values.

This paper attempts to discuss constructively these three limitations, by presenting a multisectoral model of international relations. The principle of comparative advantages, though present, is not central to this theory. What is central is the process of uneven change in sectoral productivities that affects both the international relations and the process of domestic growth. The model, while taking into account the possibility of unemployment and more in general of economic instability, focuses at international level on the consequences of the process of structural change, both in the product, technological (knowledge) and consumption space. The model hints at three conclusions. First it shows how reductive is international economics if looked at exclusively in terms of international trade. The principle of comparative advantages is one of the sources of international benefits. But it is not the only – and it is not even the primary – source of such benefits. Second, the paper will show that the gains from international trade are based crucially on changes of prices. If prices are relatively sticky, or are not allowed to change to the same degree in which the rate of specialization or the rate of change of productivities occur, the traditional gains from trade will tendentially disappear, while other problems caused by international trade will remain. Third, and most importantly, it will show that in a situation of structural dynamics, both the choice of specialization and the kind of international relations are rather complex (far more than those assumed by the traditional theory) and maintain a strategic

component. By making a wrong choice it is possible that international trade itself may result not in a positive-, but rather in a negative-sum-game.

Methodology

This is a theoretical paper, which however attempts to be “history-friendly”. It assumes an economic system based on many sectors (a multisectoral model), in which – for simplicity and without loss of generality – labour is the only factor of production (a pure labour economic theory). The technology (that is, the labour productivity) is differentiated both across sectors, across countries and across time. The model builds up on the final chapters of Pasinetti’s works (1981) and (1993), and takes into account the further developments on international trade made by Araujo and Teixeira (2004a and 2004b). It tries to interpret that kind of evidence which is also discussed in the recent literature of the new international trade (among others Brezis et al. 1993). Some results given by Samuelson (2004) on the effects of globalization (which sometime may hurt countries) are put in a different and apparently more general framework. The theoretical work will be used to tackle also some issues of economic policy.

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Key Words: international trade, human learning, structural and technological change, gains and losses from trade.

24) Guarini (2)

Titolo provvisorio: Una valutazione della crescita della produttività del lavoro nei paesi europei (o OCSE)

Descrizione del tema generale.

In questo lavoro intendo studiare quali fattori influenzano la dinamica della produttività del lavoro nei paesi europei e di conseguenza anche “se” ed “in che modo” i paesi europei di fronte ad un processo accelerato di competizione internazionale hanno orientato il loro sistema economico verso l’innovazione ed il progresso tecnico.

Per far questo, utilizzo una funzione della produttività alla Sylos Labini modificata che ha come variabile dipendente la produttività media del lavoro e come variabili indipendenti: “investimenti”, “technological skills” (low -diplomati istituti tecnici- e high -laureati in materie scientifiche-), “effetto Ricardo” (differenza tra salari e costo del capitale), “effetto Smith-Verdoorn-Kaldor” (output –export ritardato), “effetto cumulativo”(produttività ritardata).

I contributi teorici di riferimento sono:

l’approccio classico-postkeynesiano in quanto alla TFP si preferisce la produttività del lavoro, si considerano l’“effetto Smith-Verdoorn-Kaldor” che identifica la stretta relazione tra dimensione del mercato e divisione del lavoro, “l’effetto Ricardo” che si concentra sugli aumenti della produttività dovuti ad un aumento del costo del lavoro relativamente a quello dei macchinari, l’“effetto cumulativo” in quanto si ritiene che i processi di crescita siano caratterizzati da rendimenti crescenti e dunque da circoli cumulativi;

l’approccio technological capability in quanto nell’analisi empirica vengono utilizzati elementi tipici di tale approccio quali “technological skills”

Inoltre con questo tipo di impianto analitico diventa interessante studiare quali fattori influenzano il gap di produttività (del lavoro): “technological skills gap”, “Smith effect gap”. In tal modo diventa

immediato individuare le differenti “dinamiche” dei singoli paesi e se esiste un processo di convergenza/divergenza.

Natura metodologica

Lo studio è di carattere prettamente empirico pur presentando solide basi teoriche. Come tipologia di analisi econometrica intendo utilizzare una *pooled cross-section time series analysis* prendendo in considerazione i paesi europei (tutti o alcuni) per un periodo di tempo medio (da definire).

Nota di cautela

In base agli approfondimenti in itinere e ai dati disponibili, l’analisi potrà subire delle modifiche non sostanziali.

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Parole chiave

Produttività del lavoro, progresso tecnico, skills tecnologici, divisione del lavoro, rendimenti crescenti.

35) Tamberi-Lo Turco-Presbiterio (2)

Modelli di Specializzazione e crescita - Abstract

Il progetto si propone di rintracciare empiricamente la relazione dilungo periodo tra specializzazione produttiva e crescita economica. La specializzazione produttiva è intesa principalmente in senso ricardiano, avendo cioè riguardo al tipo di beni che ogni paese produce ed esporta, e non nel senso smithiano di quanto ogni paese è specializzato al proprio interno.

In linea teorica le ragioni per le quali la specializzazione produttiva conta ai fini della crescita di lungo periodo possono essere rintracciate in due diversi filoni di letteratura:

- 1) in modelli di “offerta” per cui la presenza di economie di scala differenziate per settore, induce differenti tassi di crescita della produttività (Grossman, Helpman, 1991) o differenti effetti di *learning* (Lucas, 1988) in settori diversi. Quando i paesi si specializzano, in conseguenza della presenza di vantaggi comparati differenziati, alcuni saranno vincolati a sentieri di crescita inferiori.
- 2) in modelli di stampo kaldoriano per i quali la domanda è centrale. Per esempio in Thirlwall (1980) l’elasticità di domanda di esportazioni e importazioni, insieme alla crescita della domanda mondiale, determinano un vincolo di crescita per l’economia. In questo tipo di analisi è implicito che una delle determinanti più dirette delle elasticità aggregate deriva proprio dalla specializzazione produttiva del paese, in funzione del fatto che le elasticità alla domanda sono differenziate per prodotto.

In questo contesto teorico l’obiettivo del progetto è di fornire un test empirico del legame tra specializzazione e crescita; in primo luogo, si tratta di rintracciare e comparare criticamente le performance di diversi indicatori di specializzazione; in secondo luogo, di testare l’impatto di tali indicatori sulla crescita di lungo periodo. La letteratura empirica di questo genere è, a nostra conoscenza, piuttosto scarsa (recentemente Rodrik e altri, 2005)

La nostra analisi empirica, prevede l’uso di analisi econometriche con stime di tipo panel. Si userà il più ampio numero di paesi possibile, a diverso livello di sviluppo; il periodo coperto dalle stime potrà variare a seconda della disponibilità di dati, ma dovrebbe coprire almeno l’ultimo ventennio; gli indicatori di specializzazione (da individuare) potranno essere applicati

sia a dati di *trade*, in questo caso con livelli di specificità settoriale anche spinti, sia di produzione e/o occupazione.

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Parole chiave:

Crescita economica, specializzazione, struttura

34) Cutrini (2)

Eleonora Cutrini: **“Integrazione economica europea, specializzazione e convergenza regionale”**

ABSTRACT

La relazione tra liberalizzazione degli scambi e diversificazione regionale ha un indubbio rilievo nel contesto della costruzione istituzionale europea. Da un punto di vista teorico si ritiene che la creazione del mercato unico abbia esacerbato, attraverso la specializzazione produttiva, la vulnerabilità delle economie agli shock idiosincratici di tipo settoriale. D'altro canto, l'emergere di uno spazio economico con strutture produttive sempre più dissimili è da ritenersi uno dei fattori causali della crescente disuguaglianza interregionale nel reddito, nell'occupazione e nella

produttività. L'avvio dell'Unione Economica e Monetaria ha destato un rinnovato interesse per la dimensione regionale delle problematiche economiche in seguito ai limiti posti dal Patto di Stabilità e Crescita alla capacità dei governi nazionali di far fronte, attraverso la politica fiscale, agli squilibri regionali interni.

Il lavoro si propone di indagare la relazione empirica tra crescita e specializzazione regionale, tenendo anche conto di alcuni aspetti di carattere istituzionale quali il grado di urbanizzazione, la qualità delle infrastrutture di trasporto e l'integrazione commerciale nei mercati europei.