

TWO MEZZOGIORNOS

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Abstract

The analogy between the economic problems of the Mezzogiorno region and East Germany has been initially contested by many authors. This paper argues that there are striking similarities in the two regions, in terms of the causes of their economic predicament. With an aggregate labour productivity of less than 60% relative to the rest of the country, both are true transfer economies, whose consumption exceeds production by far. Beyond locational disadvantages, the present paper identifies overdrawn wages, high social security spending and the Dutch disease problem as core reasons for the poor economic performance and discusses possible cures.

1. *The old and the new Mezzogiorno.*

The economic problems of the Italian Mezzogiorno are well known and have been extensively studied by many authors (1). Despite massive aid from the north, the economy of the south does not seem to catch up with the north. Its economy lags behind and is unable to develop the kind of productivity that would enable it to successfully compete with other regions in Europe. By way of contrast, the north has performed marvellously. Lombardia, Emilia Romagna, Trentino-Alto Adige and Valle d'Aosta are now among the highly productive regions of Europe, matching regions like Rheinland-Pfalz, Haute-Normandie or Noord-Brabant (2).

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(1) See PRASAD and UTILI (1998), BOLTUO *et al.* (1997), TAYLOR and BRADLEY (1997), FAINI, GALLI, GENNARI and ROSSI (1997), BERTOLA and ICHINO (1995), CASTRONUOVO (1992) and PANTIERI (1991).

(2) Eurostat, Press Release of February 3rd, 2000.

There now seems to be a second Mezzogiorno — East Germany. After German reunification many authors asked themselves whether a comparison between East Germany and the Mezzogiorno was justified, but they typically came to a negative conclusion (3). The initial growth performance of east Germany after unification was so promising that a comparison with the Mezzogiorno seemed far fetched. Today, however, time has brought more evidence. The evidence shows that the fundamental differences between Italy's south and Germany's east that some authors had expected initially, have not materialised. In fact, as this paper will argue, there is a striking similarity between the two regions both in terms of the characteristics and the causes of the economic problems from which they suffer.

2. Historic differences and present similarities.

Different histories.

In order to place the problem in the right perspective, a look at the history is useful. From a historical point of view it would be hard to find any two regions in Europe that were as different as east Germany and southern Italy were before the second world war (4). At the time, southern Italy was a predominantly agrarian region with an agricultural share in the work force of about 56% in 1936, and its per capita income was 60% of that of the rest of Italy, the Centro Nord (5). East Germany (using today's definition), on the other hand was more productive than west Germany with an agricultural share of only 22,1% and a per capita income of 27% above that of West Germany. In fact, east Germany was most productive region of continental Europe, hosting some of the world's most advanced firms in the areas of precision engineering, optics, chemicals and aircraft production.

After the war, east Germany became the industrial showcase of the eastern bloc, with an enormously high labour share of manufac-

turing in the order of 34%. By contrast, the corresponding manufacturing share in southern Italy was only about 20%.

TABLE 1. — *Southern Italy and east Germany before the War GDP per capita in US\$ (at 1937 prices)*

Country	GDP per capita (1987)
Germany	340
West	324
East	418
	(= 127% of West)
Italy	135
Centro Nord	157
Mezzogiorno	94
	(= 60% of Centro Nord)
Bulgaria	75
Czechoslovakia	170
Hungary	120
Poland	100
Romania	81
Yugoslavia	80
USA	570
France	265
United Kingdom	440

Sources: KASER and RADICE (1985, S.372), WILLIAMSON, J.G. (1965, S. 68-70) and own calculations.

Low per capita output, low growth and no visible convergence.

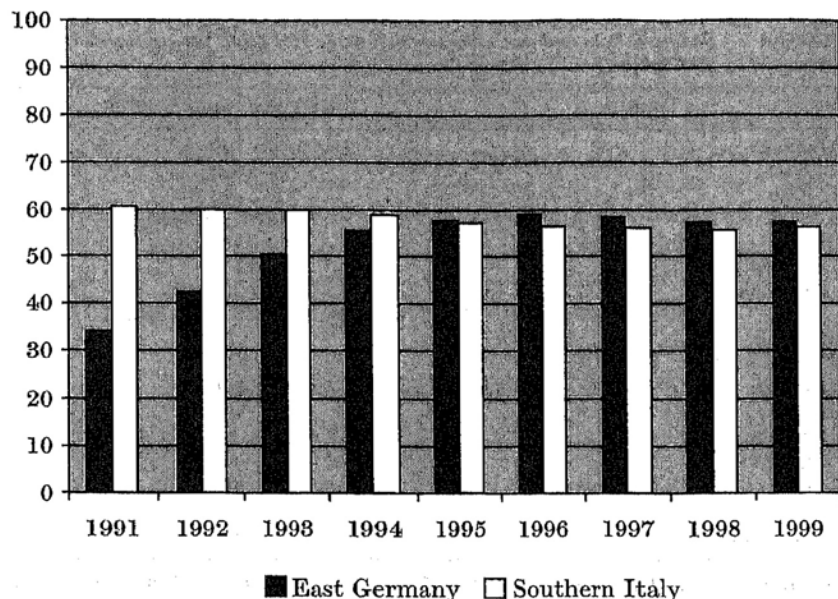
Given these historical differences, it would be more than surprising if the two regions were similar today. Yet, they are. The most striking similarity is shown in *Figure 1* which illustrates the labour productivity aggregates in the two regions relative to the rest of their respective countries for all years for which common data are available. While south Italian labour productivity has been slightly below 60% with a declining tendency over the period considered, east German productivity was very low in 1991, but increased rapidly thereafter. This rapid increase induced the initial optimism among the politicians and some economists. Currently, however, no further increase is visible. Since 1996, where aggregate labour productivity peaked at 59%, the level has not increased any further and is even declining. In fact, it seems that both Mezzogiornos' productivity figures have been unable to permanently exceed the 60%-level. Of course, no one knows whether this is mere chance and how the future will be. However, at present, no change in this situation is visible.

(3) See PANTIERI (1991).

(4) In this paper we define east Germany as the former territory of the GDR (East Berlin, Mecklenburg-Vorpommern, Sachsen, Thüringen, Sachsen-Anhalt, Brandenburg) and west Germany as the remaining parts of Germany in today's boundaries. Similarly, southern Italy (the Italian Mezzogiorno) is defined as the provinces of Abruzzo, Molise, Campania, Puglia, Basilicata, Calabria, Sicilia and Sardegna and «northern» Italy or the «Centro Nord» as the rest of Italy, again in its current borders.

(5) See ZAMAGNI (1998).

FIGURE 1. — Aggregate labour productivity relative to rest of country (6)
(in terms of GDP/population at working age)

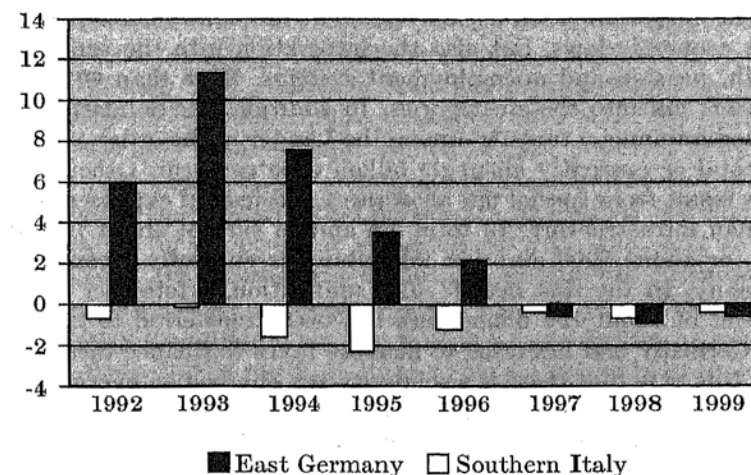


Sources: Associazione per lo Sviluppo dell'Industria nel Mezzogiorno (SVIMEZ): Conti economici delle regioni italiane 1970-98.

The halt in convergence is also demonstrated in Figure 2 which compares the growth, or better shrinking rates of the two Mezzogiornos relative to the rest of their respective countries, again for all years for which common data are available. The figure shows that, over the last four years, the respective regions have drifted away from the more productive parts of their countries rather than converging with them.

(6) In 2000, Germany's system of national accounts has been changed in a way which makes it more difficult to trace the productivity figures back to the former communist region, because the two parts of Berlin are no longer distinguished. The quoted figures were recalculated from the new GEP figures on the basis of the old borders by the ifo Institute.

FIGURE 2. — «Convergence» rates of the two Mezzogiornos with rest of respective countries
(Difference in growth rates between east and west Germany and between southern Italy and Centro Nord)



Sources: Associazione per lo Sviluppo dell'Industria nel Mezzogiorno (SVIMEZ): Conti economici delle regioni italiane 1970-98 and own calculations.

The time period for east Germany is too short to be sure about a lack of convergence. However, in the Italian case, sufficient information is available. In the 1950ies the Italian Mezzogiorno had shown a substantial amount of growth, allowing for some sort of catching up process. However, thereafter, from about 1960 — the introduction of the «erga omnes» wages rule - no further convergence has been visible. To provide harder evidence of this fact, we applied a statistical test based on unit root procedures looking at the time path in the cross regional differences in real per capita income. Taking all available data from 1970 — 1998 into account, we reject the hypothesis of convergence. In fact, we find that there is a significant time trend in the output differences which implies that the two regions have been drifting apart. The appendix explains the details of our test.

Transfer economies.

The low productivity of the two Mezzogiornos would result in huge income differentials relative to the more developed parts of their countries, if the two regions had to live on their own. However, sub-

stantial fiscal transfers via central budgets have effectively reduced the size of these differentials.

In Germany, the main fiscal transfers flow via the social security system since unification not only brought the same currency and the same economic laws, but also the integration into the same social health, pension and unemployment systems. More than 60% of all transfers fall into these categories. In addition, the Solidarpakt Ost defined a financial transfer among the Länder in the order of 32% of the total or currently about 25 billion euro per year. Other advantages result from special tax allowances and federal expenses on east German infrastructure. In total, an annual sum of about 70 billion euro, or about 5000 euro per inhabitant, is currently given to east Germany. In the first decade after unification, a total net resource transfer of about 750 billion euro has been transferred to the east.

Germany had hesitated to increase taxes to finance these transfers. It is true that there is a solidarity tax charged on everyone, but its revenue is only 10.25 billion euro per year, not more than 14% of the annual total. Most of the funds channelled to the east have been borrowed in the capital market. This is probably the major reason for the high German interest rates and the breakdown of the EMS in 1992 (see Sinn 1999), and it explains why Germany was unable to meet the Maastricht debt criterion. The west German public debt was about 450 billion euro in 1989. Now the total German public debt is 1.15 trillion euro.

TABLE 2. — Public resource transfers from west to east Germany (bill. euro)

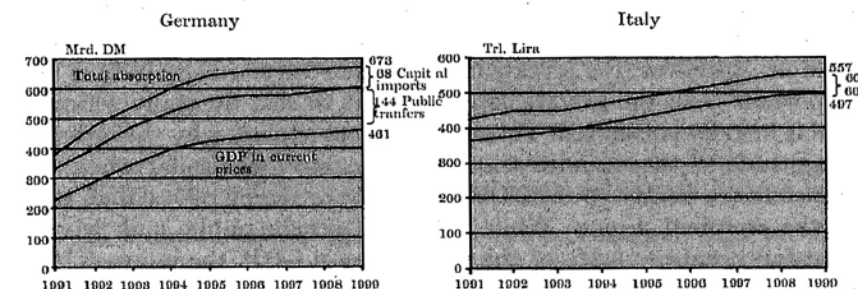
Economic promotion, infrastructure, improvement of general living conditions	20.9
Treuhand	0.6
Social expenditure	46.1
Financial aid to Länder and Gemeinden (Solidarpakt Ost)	24.5
Other (defence, personal cost, etc.)	8.4
Revenue flows from East to West (-)	-26.0
Total	75.5

Sources: Bundesministerium der Finanzen, 1998, homepage.

In Italy, there are various channels for transfers from the north to the south, but as Italy is not a federal state, the transfers are not regularly documented. In 1987, the Bank of Italy estimated the net transfers from the Centro-Nord to the Mezzogiorno to amount to 35 bill. Euro. Galli and Onado (1990) estimate the transfers to amount to 43 bill. Euro in 1988. Although there is the Patto di Stabilità Interno which resembles the German *Länder-Finanzausgleich*, Faini and Galli (1993) argue that most funds are channelled in a hidden way through

the federal budget. Minimum pensions, the national health service, unemployment insurance and public expenditures which are financed by the federal government are probably the major redistribution mechanisms. Faini and Galli (1993) further point out that financial subsidies to investment, first introduced in the 1960s, have reduced the cost of long term capital in Southern manufacturing by about 40%. There are even more indirect transfers than these. For example, public firms have to invest most of their funds in southern Italy and, according to Alesina et. al. (1999), public employment also plays a major role in the redistribution process. In fact, while the shares of employees in the government sector are between 12% and 15% in Central Nord, the Mezzogiorno has a share of 22% (7). Expressed as public employees per resident in working age (between 15 and 65 years of age), the numbers are less dramatic, but point in the same direction. While in the north of Italy, there are 6.5 public employees per resident, the equivalent figure for the south is 8 — thus public employment in the South is about 20% higher than in the north. By contrast, east Germany has only a government share which is three percentage points more than in the west. Recently, the internal Italian subsidies have gone down and have partly been replaced with EU subsidies, which in 1999 amounted to about 3 billion euro.

FIGURE 3. — Absorption, GDP and import surplus



Sources: SVIMEZ, German Statistical office, Ministry of Economics, German Institute for Economic Research and German National Bank.

Note: The official absorption statistics for Germany are available only until 1994. In the subsequent years, absorption has been calculated from the official GDP and transfer figures by adding an estimate of the private capital import based on Ifo's investment data base.

(7) ISTAT, 1996, Ministero del Tesoro.

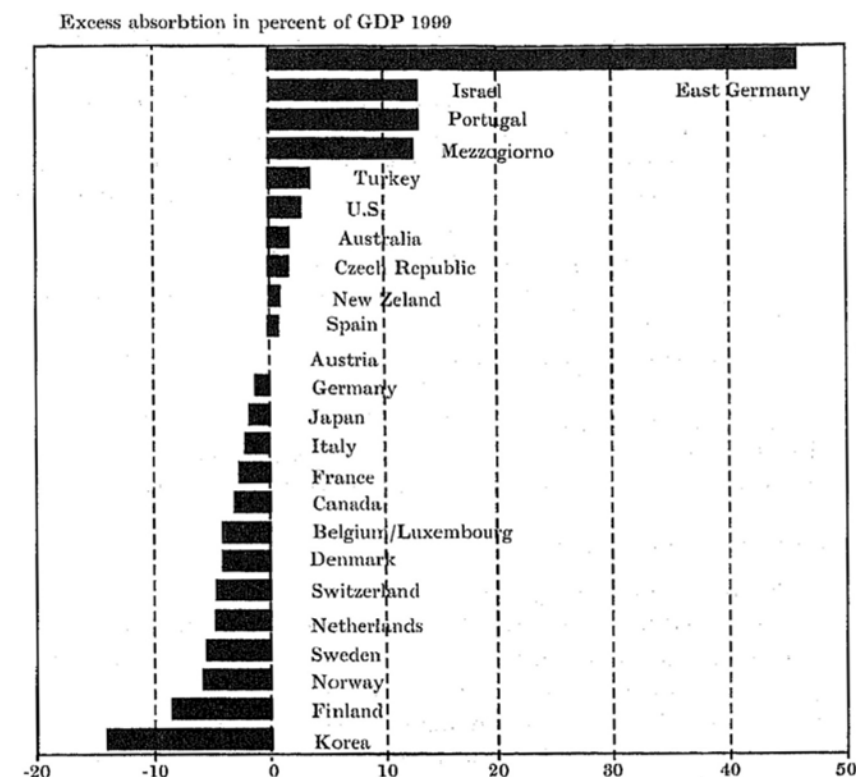
The public transfers and private capital movements made it possible for the people living in the Mezzogiornos to consume more than they produced. *Figure 3* shows the time paths of aggregate absorption — the resources consumed by private households, firms and the government — and GDP. The difference between these two variables is the import surplus. The figures also demonstrate, how much of this surplus is financed with public transfers and private capital flows (8). In the east German case, the import surplus is currently about 46% of east German GDP, and in the Italian case its is about 12% of south Italian GDP.

The two regions' dependency on resource imports is extraordinary. *Figure 4* ranks different countries and regions of the world with regard to their respective net import shares in GDP. It can be seen that east Germany, in particular, contrasts sharply with the others depicted in the figure. Southern Italy, on the other hand resembles economies like Israel and Portugal which are heavily financed by the US and the EU. The Italian Mezzogiorno is a veritable transfer economy, but it has found its master with its German counterpart. In the Italian Mezzogiorno every seventh Lira spent comes from the north, but in east Germany every third deutschmark comes from the west.

Obviously, the south Italian reliance on external resources is much smaller than the east German one if compared to the south Italian GDP. However, southern Italy is relatively much larger than east Germany. While east Germany is inhabited by 18% of the German population, southern Italy includes 36% of the total Italian population. Moreover, the private capital import to southern Italy is less important than the private capital import to east Germany which is still is heavily subsidised. These two aspects explain why the order of magnitude of the resource transfers appears more similar when the transfers are related to the GDP of the paying region rather than that of the recipient region. While internal German public and private transfers comprise 6.2% of the west German GDP, the internal Italian transfers amount to 4.2% of north Italian GDP.

(8) In the East German case private capital flows comprise about 3,5 billion euro borrowed by east German government bodies.

FIGURE 4. — *Import surpluses of different regions and countries*



Sources: OECD Economic outlook, SVIMEZ, German Statistical office, Ministry of Economics, German Institute for Economic Research and German National Bank.

It is not surprising that transfer economies have high incomes despite their low productivity. In 1997 east German disposable household income per capita was 85% of the west German one, and southern Italy's disposable income per capita was 65% of the respective figure in Centro Nord. Pensions are even 10% higher in east than in west Germany because more women were working in the communist state and because the GDR pension claims had been converted with overly generous terms (9).

(9) See NIERHUIS (1999).

3. *The reasons.*

The lack of productivity convergence between the Mezzogiornos and the more developed north of Italy and west of Germany cannot easily be explained with a primitive two-factor variant of the neo-classical model. Operating in the same country implies the same legal system and full access to the technological knowledge which is available in the more developed region. Thus, the production function should be the same and, with constant returns to scale, capital and labour movements imply equal factor prices. Equal factor prices, in turn, imply equal capital intensities and equal labour productivities.

When the neo-classical model is enriched with location preferences of the population and capital adjustment costs, it will not imply an immediate convergence, but a gradual convergence with two sided guest-worker flows during the adjustment phase, which in the end will also lead to a full equalisation of factor prices and productivities (10). So, why is it then that convergence does not occur?

Locational disadvantages.

To find an answer, a yet more extended version of the neo-classical model could be considered where land and similar idiosyncratic location factors are taken into account, which cannot be altered. If a region has a worse location than another one, say, because its transport costs to existing centres are high and/or its infrastructure is bad, it will have a lower «total» factor productivity with regard to capital and labour. In the case of location preferences of the labour force, this will imply a low capital intensity of production, a low labour productivity and low wages.

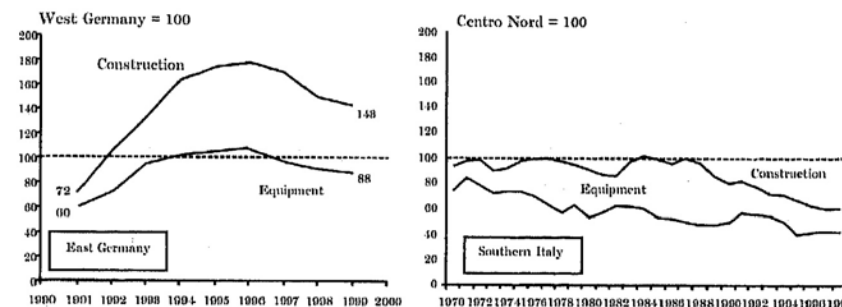
Such a situation could apply in the two Mezzogiornos which are both located at the outskirts of the EU and are still lacking in adequate quality of their local infrastructure. If it prevails and if a steady state growth path with a constant regional structure prevails, investment per capita will be lower than in the rest of the country. The lower level of per capita investment will not have to show up in terms of construction investment, because local land prices are low,

(10) See SINN (2000). Ordinary neo-classical growth models of the Solow or «endogenous growth» variety are not well suited to studying regional convergence, because they abstract from labour migration and assume an internal capital formation from domestic savings rather than capital movements.

but in terms of low levels of equipment investment which consists mainly of traded commodities.

Figure 5 illustrates the time paths of construction and equipment investment in the two Mezzogiornos. The figure shows that east Germany is performing much better than southern Italy, with an impressive level of construction investment and substantially more equipment investment. However, recently even the east German equipment investment per capita has fallen significantly below the west German value, indicating a clear halt in convergence of the relative capital endowments. In southern Italy equipment investment was only about 40% of that in northern Italy, and in east Germany it was about 88% of that in west Germany.

FIGURE 5. — *Per capita investment in construction and equipment relative to developed region (in terms of investment/population in working age)*



Sources: SVIMEZ, Statistisches Bundesamt 2000, Fachserie 18 (Investitionen in Bauten); ifo Investorenrechnung; Statistisches Bundesamt 1999 Fachserie 1, Reihe 4.1.1 (Erwerbsfähige); Müller (2000). Investment in equipment for Germany 1999: estimate of the ifo Institute.

Unemployment.

Roughly speaking, the observed level of investment seems to be compatible with the neo-classical model thus described. Note, however, that the neo-classical model would predict full employment. The low wage would imply a low population density, since many natives would work and live in other regions, but it would not imply unemployment. As Table 3 shows, this prediction is not compatible with reality, though. In the Italian Mezzogiorno, unemployment is 22%, but in the north it is only 6,5%, and the respective figures for east and west Germany are 17,2% and 8,2%. Obviously the two Mezzogiornos do have severe employment problems.

TABLE 8. — *Unemployment rates in 1999 (%)*

	Mezzogiorno/cast	Centro Nord/west
Italy	22.0	6.5
Germany	17.2	8.2

Sources: SVIMEZ and Bundesanstalt für Arbeit.

The neo-classical model can explain unemployment with wages that exceed the market clearing level, and under the assumptions made it would be sufficient for such an outcome if the Mezzogiorno wage were equal to the wage in the region with the better location conditions. The high wage creates unemployment, which, because of the Harris-Todaro argument, prevails in a migration equilibrium. It drives capital away, and although it tends to increase the capital intensity inside the firms, it further reduces the aggregate capital intensity and the aggregate labour productivity in terms of the number of people in working age.

Proxy negotiations.

The question remains why wages have been set at a level above the market clearing wage. Surprisingly, the answers for the two Mezzogiornos are very similar indeed.

In Italy, regions could set their wages separately during the fifties and early sixties, and this was the time when the south showed signs of catching up with the north. However, in the late sixties, trade unions gained power (in the *autunno caldo* movement) and succeeded in equalising the wages throughout Italy in collective nationwide wage agreements (11). The system of nation-wide wage formation has been operating since then and has effectively equalised union wages in the north and the south. In 1999, the system was modified by reintroducing the possibility of regional wage differentiation, but as of today this modification has not had any influence.

In east Germany, wages were only about one third of those in the west after the German currency union in 1990, but the subsequent wage negotiations brought about a rapid wage adjustment, even though Germany's collective wage bargaining is carried out on a regional rather than national level. The reason why the German negotiations nevertheless resulted in a wage adjustment lies in the fact that it was the west German competitors of the east German firms

that had effectively taken over the task of negotiating the east German wages. In 1991, when the decisive wage settlements took place, the Treuhand agency had just started to privatise the ex-communist economy, and at that time there were no private entrepreneurs who could have participated in the wage negotiations. Thus west German employers stepped in as proxy negotiators. Moreover, the newly founded unions were under full western control. Thus, in the negotiations westerners sat at both sides of the tables, and they unanimously agreed to fully equalise the union wages as quickly as possible, which basically meant tripling them. They even agreed to unusual five-year contracts which fully specified the wage equalisation path in order to bind future east German firms and to effectively prevent them from threatening their markets.

It is unclear to the authors whether similar motives were driving the collective negotiations in Italy, too. However, it seems plausible to assume, given that the wage had to be uniform, that the employers and unions of the north had a much larger influence on the determination of the Italian wages than those of the south and that they followed their own objectives, disregarding the problems of the Mezzogiorno.

Overdrawn wages.

The implications of the Italian and German wage negotiations are shown in *Figure 6*, which gives the time paths of hourly wage cost in manufacturing for different countries and regions. In this figure, the west German wage cost in manufacturing is set equal to 100, since it is the highest in the world. All other wage costs are expressed in relation to the German one.

The Figure shows that east German wages have increased dramatically in the last decade although a full equalisation of actual wages has not taken place. Before unification, the east German wage cost in manufacturing was 7% of the west German wage, when calculated at the then prevailing exchange rate. Now it is over 70%. Wages were quadrupled by the one-to-one currency conversion in 1990 because this was an effective revaluation by the factor 4.3. And thereafter they were tripled in the proxy negotiations which did not, however, for reasons explained below, fully affect the actual wages. No economy in the world could have survived the a ten-fold increase in the relative wage that was experienced by east Germany in only ten years. It should be stressed that the figure refers to the

(11) See ATTANASIO and PADOA SCHIOPPA (1991).