1 MEASURING THE INTERACTION OF STRUCTURAL CHANGES WITH INFLATION

Emilian DOBRESCU[1]

Abstract

The paper is organized in four chapters. The first describes the methodological framework of the investigation, insisting on defining the sectoral changes and the relative prices, as well as on their interaction (as expectations and as real processes); the theoretical considerations are algebraically formalized in order to be analyzed statistically.

The second chapter is devoted to the data problems, with emphasis on the configuration of input-output tables used in application and on the main trends identified in the structural evolution of the Romanian economy during 1989-2005.

The third – as a main one – contains a detailed econometric analysis. The main assumption of the paper is that the downward price rigidity cannot be separated from the corresponding downward output rigidity. They represent an indestructible tandem. In other words, the downward price rigidity is intimately connected not only to the nominal wage low flexibility, but to the slow employment adjustments, too. This approach has many consequences. From this point of view, the orthogonal regression is admitted as a more suitable method as compared to the direct and the reverse OLS.

The paper ends with a short set of concluding remarks, including possible extensions of this research.

Keywords: structural changes, relative prices, downward price rigidity, downward output rigidity, orthogonal regression

JEL Classification: C22, C32, C43, E31

Introduction

The transition of ex-communist countries to the market mechanisms involves deep institutional, technological and managerial transformations, which are accompanied by extensive changes in the structure of demand and supply. These mutations develop under significant and persistent inflationary pressures. Under these circumstances, we think that the statistical series of the emergent economies can also represent a suitable "experimental platform" for measuring the interaction between structural breaks and

[1] Senior Researcher, "Costin C. Kiriţescu" National Institute for Economic Research, Member of the Romanian Academy.

dynamics of prices. The present paper uses as an example the Romanian experience during the period 1989-2005.

The paper is organized in four chapters. The first describes the methodological framework of our investigation, insisting on defining the sectoral changes and the relative prices, as well as on their interaction (as expectations and as real processes); the theoretical considerations are algebraically formalized in order to be analyzed statistically. The second chapter is dedicated to the data problems, with emphasis on the configuration of input-output tables used in the application and on the main trends identified in the structural evolution of the Romanian economy. The third – the main one – contains a detailed econometric analysis, implying not only usual procedures (as direct and reverse OLS), but also some less practiced techniques (for instance, the orthogonal regression). The paper ends with a short set of concluding remarks. We also present some possible extensions of this research.

I. The Methodological Framework

1. Generally, the structural changes are interpreted as re-allocations of production factors across different segments of the given economy. They have been studied from many perspectives, either as the expression of the deep shifts in technology, demographic trends, consumer preferences, world economic environment (Kuznets, 1966; Baumol, Blacman and Wolff, 1985; Bezdek and Wendling, 1976; Laitner, 2000; Maddison, 2001; Ngai and Pissarides, 2004; Oulton, 1999; van der Linden and Dietzenbacher, 1999; Bagnoli, Château, and Sahin, 2006), or - more specifically – in relation with the dynamics of prices (Balke and Wynne, 1996; Ball and Mankiw, 1995; Bomberger and Makinen, 1993; Caglayan and Filiztekin, 2003; Coorey, Mecagni, and Offerdal, 1996; Fielding and Mizen, 2000; Laidler, 2003; Nautz and Scharff, 2006; Ratfai, 2001).

The paper is based on the latter approach. Besides, it operates with a more limited interpretation of the structural changes, focusing on the shifts in the weights of different sectors in the global output. Such shifts may or may not involve modifications in the respective production functions.

2. These relative sectoral changes in output are measured by the ratio of the sectoral growth rates to the global growth rate (evidently, both in real terms). Similarly, the relative price variability is defined by the ratio of the sectoral price indices to the corresponding aggregate price index. Such estimations are usual in theoretical and empirical analysis. With this aim in view, the following symbols will be used:

i – sector; i=1, 2,…,n;

t – current period and (t-1) – previous one;

V_{it} - sectoral output at current prices;

p_{it} – sectoral price index;

q_{it} – sectoral output index at constant prices;

G_t - aggregate output at current prices;

P_t – aggregate price index;

Q_t – aggregate output index at constant prices;

w_{it} – weight of the sector i in total;

rp_{it} – sectoral relative price index;

rq_{it} – sectoral relative output index (structural adjustment);
wrp_{it} – weighted sectoral relative price index;
wrq_{it} – weighted sectoral relative output index.

3. These magnitudes are linked by several identities and accounting definitions:

$$G_t=\Sigma V_{it}=\Sigma(V_{i(t-1)}*q_{it}*p_{it}) \quad [I.1]$$

$$G_t/G_{t-1}=P_t*Q_t \quad [I.2]$$

$$V_{it}/G_t=w_{it} \quad [I.3]$$

$$P_t*Q_t=\Sigma(w_{i(t-1)}*q_{it}*p_{it}) \quad [I.4]$$

$$rp_{it}=p_{it}/P_t \quad [I.5]$$

$$rq_{it}=q_{it}/Q_t \quad [I.6]$$

$$\Sigma(w_{i(t-1)}*rq_i*rp_i)=1 \quad [I.7]$$

$$wrp_{it}=w_{i(t-1)}*rp_{it} \quad [I.8]$$

$$wrq_{it}=w_{i(t-1)}*rq_{it} \quad [I.9]$$

The relationship between the relative sectoral changes in output and the relative price variability can be empirically researched by comparing two pairs of series: rp_{it} and rq_{it} or wrp_{it} and wrq_{it}. It seems natural to consider more relevant the statistical analysis which involves not only the dynamics of prices and of output themselves, but also the weight of the respective sector in the economy. In other words, the second pair (wrp_{it} and wrq_{it}) will be preferred.

4. It is often admitted that the structural corrections in supply are determined and preceded – always or, at least, usually – by the modifications in the prices of different groups of goods and services.

4.1. This succession is accepted even in the case of supply shocks, taking into account that new input-output coefficients have impact on the demand for primary resources and intermediate products. Such an assumption is tempting. Nevertheless, it is not realistic enough. The present paper promotes - as its conceptual cornerstone - another hypothesis, namely that the binomial "relative sectoral changes in output, on one hand, and relative price variability, on the other" can be consistently treated as a strong interdependent relationship, not only as a simple univocal one.

4.2. The expectations theory could be useful in this discussion (Fisher, 1980; Sargent, 1993; Evans and Ramey, 2001). In an extremely simplified scheme, we can distinguish the following categories of economic agents implied in demand-supply mechanisms: households, firms, government, and the banking system. The transaction decisions of each of them are based on expectations determined not only by their own preferences and corresponding objective-functions, but also on the predictable reactions of other agents with which they interact.

- Thus, the households' intention for consumption (volume, frequency, shopping basket) and savings are intimately connected with their anticipations regarding the remuneration of production factors (labour income, profits) that depend on the firms' turnover, the direct and indirect taxation, the state budget transfers, the prices (including exchange rate), the interest rate.

- In a similar way, the firms conceive business plans starting from their assumptions concerning their own production costs and desirable investments, on one hand, and the possible changes in domestic demand, in international competitiveness, public policies, prices, interest rate, on the other hand.
- It is also obvious that the Government, when building the public budget, must take into account its political objectives, as well as the projections for the most important macroeconomic indicators (which reflect the outcomes of firms, the private and public consumption, the global domestic and external environment, and the monetary variables).
- The position of the banking system can also be sketched in a similar manner.

4.3. The above considerations are consistent independently with the paradigm adopted for the economic expectations - adaptive or rational.

Normally, the expectation-forming process is highly complicated and is developing through many transparent or informal channels (individual perceptions, micro and macro-forecasts, dynamics of orders, advertising, households and firm surveys, explicit or implicit negotiations, data on capital markets, analytical commentaries, new legislation and parliament debates, Government's and Central Bank's decisions, trade-union requirements, etc). The confrontation of expectations of different agents is iterative and self-corrective. Its final results are the contracts and the real flows of goods, services, and financial resources.

4.4. Consequently, sectoral and price changes – as the other economic parameters – cannot be dissociated. They are reciprocally conditioned on both levels of the economic activity, either in the expectations-forming process or in the transactions themselves. This interpretation has, of course, many cognitive consequences. Some of them - as the causality problem - exceed the intended background of the present paper.

There is, however, one computational implication, which, in our opinion, cannot be ignored. If the relative price changes (x) and the relative sectoral changes in output (y) are interdependent, then the relation $y=f(x)$ is equally valid as its symmetrical form $x=f(y)$. Under these conditions, it seems logical to admit that such a property ought to be also rediscovered in the corresponding econometric coefficients. This question will be further examined from a technical point of view.

II. An Overview of the Database

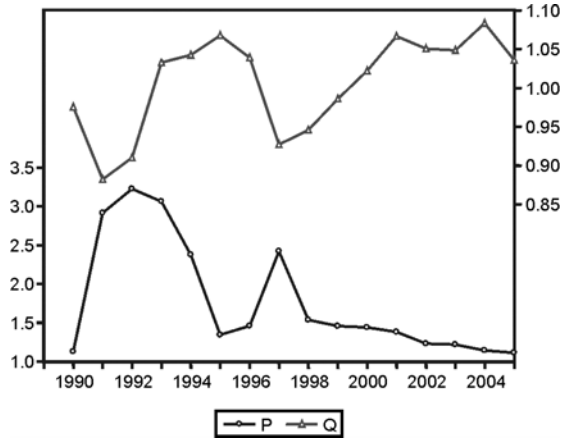
1. The empirical analysis will be based on the annual input-output tables of the Romanian economy for the period 1989-2005. The extended classification of these tables contains 105 branches (National Institute of Statistics - Romania).

Our application introduces several simplifications. Thus, the branches belonging to nuclear and military fields, for which the data were not available, have been excluded. Some related branches were grouped in order to avoid negative values induced - in different moments (especially at the beginning of transition) - by the Government policies concerning production subsidies and administered prices. This new classification is described in Appendix 1, comparatively with the official codification; the number of retained sectors (84) remains anyway representative.

The output is approximated by the gross value added (GVA), while the prices are represented by the GVA deflators. Appendix 2 presents detailed data on their annual indices (q and p) and the corresponding sectoral weights (w). On this basis, the relative (rq and rp) and weighted relative (wrq and wrp) changes are computed (Appendix 3).

2. When interpreting the data included in Appendices 2 and 3 we should not forget that Romania's transition from command to market economy was marked by high inflation and severe oscillations of the global output (Graph PQ).

Graph PQ



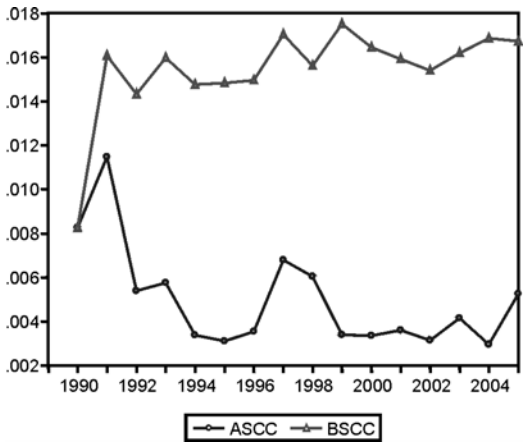
The annual structural changes coefficient (ascc) and base structural changes coefficient (bscc) are estimated as follows:

$$ascc=[(1/n)*\Sigma(w_{it}-w_{i(t-1)})^2]^(1/2) \quad [II.1]$$

$$bscc=[(1/n)*\Sigma(w_{it}-w_{i89})^2]^(1/2) \quad [II.2]$$

The ascc and bscc coefficients are presented in Graph SCC.

Graph SCC



3. This turbulent context did not imply a chaotic evolution. Despite the oscillations induced by the unstable circumstances of transition and the frequent changes in international environment, several trends of the economic structure can be, however, distinguished. With this aim in view, the basic nomenclature of the 84 sectors (defined in Appendix 1) was packed down into 10 groups of branches (Appendix 4). Their shares in the total gross value added are denoted by WAG_i. Table 1 presents this aggregation.

Table 1

Aggregated Classification

Group	Main included sectors	Symbol of group's share in total GVA	Trend during 1989-2005
AG1	Agriculture, forestry, hunting, and fishing	WAG1	Descending
AG2	Extraction of coal, natural gas, ferrous and non-ferrous metals, stone, sand and clay, chemical minerals, salt	WAG2	Descending
AG3	Production and distribution of electric power, gas (excluding methane extraction), thermal power, and water	WAG3	Ascending-descending
AG4	Production and processing of meat and fish, fruit and vegetables, animal oils and fats, milk, grain mill products, starches, other food products, beverages, tobacco	WAG4	Ascending-descending
AG5	Textiles and textile wearing apparel, fur and leather wearing apparel, leather goods and footwear, wood processing, pulp, paper and cardboard, furniture production	WAG5	Descending
	Metallic constructions and metal products, equipment		

Group	Main included sectors	Symbol of group's share in total GVA	Trend during 1989-2005
AG6	and machinery for different branches, machine tools, domestic appliances, computers, electric machinery and appliances, radio-T.V. and communication equipment, medical and optical apparatus, precision and watch making instruments, means of road transport, ships and boats, railway and tramway locomotives and rolling stock, aircraft and spacecraft, manufacture of motorcycles and bicycles	WAG6	Descending
AG7	Oil processing, basic chemicals, manufacture of pesticides and other agri-chemical substances, paints and varnishes, pharmaceuticals and medicinal products, soap and detergents, perfumes and toilet preparations, man-made fibers, rubber and plastics, glass, refractory and non-refractory ceramics, cement and building materials, ferrous and non-ferrous metallurgy, other industrial activities	WAG7	Descending
AG8	Constructions	WAG8	Ascending
AG9	Transport via railways and pipelines, water and air transport, activities of travel agencies and tour operators, other transports, post, telecommunications	WAG9	Ascending
AG10	Wholesale and retail trade, hotels and restaurants, financial, banking, insurance, business, and real estate services, computer and related operations, research and development, architectural and engineering activities (including technical consultancy), public administration and defense, education, health and social security, other community and personal service activities	WAG10	Ascending

This aggregation takes into account the main features of the respective sectors. Thus, the first group includes branches that significantly depend on the climate conditions. The production of the second one – practically, the mining industries - is essentially influenced by the peculiarities of the mineral deposits (due to the strong connection between the extraction and processing of oil, both are included in the manufacturing industries). The third group represents the quasi-generally used energy utilities. All industries linked with agriculture are integrated into the fourth. The next one comprises a large variety of labour intensive sectors. The sixth group covers the machine building branches, which have a crucial role in the investment process and modern civilization. The rest of the manufacturing industries constitute the seventh group. All infrastructures, productive and civil constructions are included in the next group. The ninth one is dedicated to transports and telecommunications. Finally, the tenth group aggregates the service activities.

In order to identify the trends which characterize the evolution of these ten groups, the Hodrick-Prescott filter has been applied to the data presented in Appendix 4.

4. The classification described in Table 1 has the advantage of being easily translated into the three classical global areas for decomposing economic activities (Appendix 4): primary (WPRIM), secondary (WSEC) and tertiary (WTER):

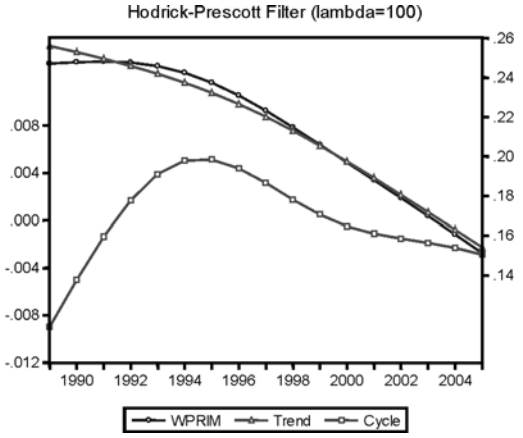
$$WPRIM=WAG1+WAG2+WAG3 \quad [II.3]$$

$$WSEC=WAG4+WAG5+WAG6+WAG7+WAG8 \quad [II.4]$$

$$WTER=WAG9+WAG10 \quad [II.5]$$

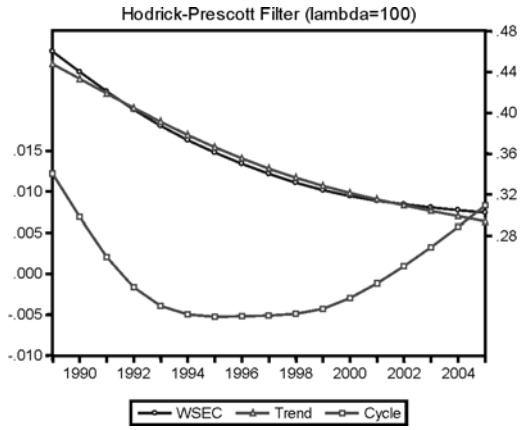
For WPRIM, the descending tendency of its weight in the total gross value added is very clear. It results especially from the persistent decline of agriculture and other similar branches, on one hand, and the deep restructuring of mining industries (first of all coal production), on the other hand.

Graph HPWPRIM



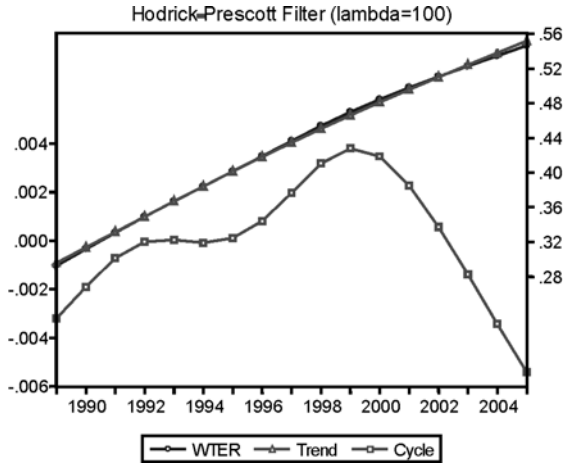
- The share of the secondary area in total gross value added also decreases (Graph HPWSEC), but it visibly tends towards stabilization.

Graph HPWSEC



- In the case of WTER, we see a firm ascending trend (Graph HPWTER).

Graph HPWTER

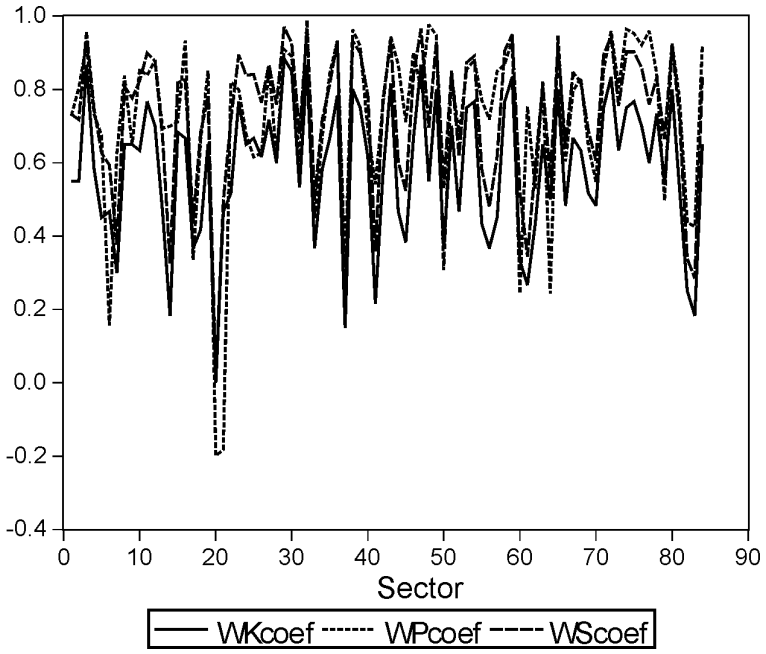


5. All the above structural changes were induced by the accommodation of output to domestic demand, and especially by opening the economy to international markets, first of all by integrating Romania into the European Union. Undoubtedly, due to such a convulsive process, it is difficult to extract some rules for the correlation between structural changes and prices. Nevertheless, this attempt can be useful, at least from a methodological point of view.

III. Econometric Analysis

1. As we have already mentioned, the relationship between the relative sectoral changes in output and the relative price variability is examined using their weighted expressions (wrq_{it} and wrp_{it} series). As statistical measures of its intensity, the correlations Pearson (WPcoef), Spearman (WScoef), and Kendall (WKcoef) were computed (Appendix 5). Generally, they are positive (only in two cases WPcoef are negative). Graphically, they look as follows (Graph WCOR):

Graph WCOR



The distribution of the obtained correlation coefficients is presented in Table 2.

Table 2

Correlation coefficients between the sectoral changes and the relative prices, in their weighted determinations (wrp_{it}-wrq_{it})

Levels of the correlation coefficients	Number of WPcoef	Number of WScoef	Number of WKcoef
<0	2	0	0
0…0.1	0	1	1
0.1...0.2	1	1	3
0.2...0.3	2	1	3
0.3...0.4	3	5	7

Levels of the correlation coefficients	Number of WPcoef	Number of WScoef	Number of WKcoef
0.4...0.5	4	3	12
0.5...0.6	4	8	12
0.6...0.7	15	12	19
0.7…0.8	11	14	15
0.8…0.9	22	21	12
0.9…1	20	18	0
Total	84	84	84

Therefore, 72 WPcoef, 73 WScoef, and 58 WKcoef exceed 0.5. Taking into account these results, the simplest linear regressions were estimated.

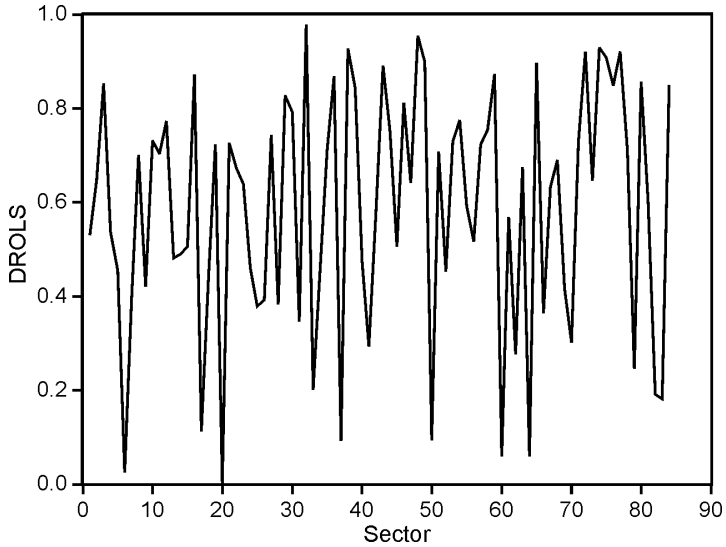
2. The ordinary least square method was applied in both forms:

- direct (DOLS), which means $wrp_i=c(i)+c(1i)*wrq_i$, and
- reverse (ROLS), respectively $wrq_i=c(2i)+c(3i)*wrp_i$.

Regarding wrp_i and wrq_i, the statistical series deduced in Appendix 3 were used without any corrections. Only two dummies were included, one in equation 20 (for 1990) and another in equation 21 (for 1991).

2.1. Both applications (DOLS and ROLS) are presented in Appendix 6 (System Sys1a09 and System Sys1b09).

Graph DROLS



According to the results, in two-thirds of cases the probability of a null hypothesis does not exceed 0.5. Concerning c(1i) and c(3i), respectively – which define the slopes of regressions – in only two sectors such a probability goes beyond this limit. It is also

important to note that all these essential coefficients are positive (as theoretically expected).

Normally, the regressions characterized in Appendix 6 could be improved by introducing lags or new explanatory variables. For simplicity, we maintained the same specification for all the sectors.

2.2. This option was guided by an additional reason. Even improved, the parameters determined in OLS cannot elude a difficult question. As we know, the separate regressions (DOLS) and (ROLS) are not reversible, except for the trivial case when the Pearson correlation between the involved variables is 1 in modulus.

In our applications, such a reversibility requires that estimates c(3i) (from Sys1b09) be the opposite of the corresponding c(1i) (computed in Sys1a09). In other words, their product must be equal to unit. In Appendix 6, this product is calculated for all 84 equations (see Graph DROLS).

Therefore, the series of coefficients c(1i) and c(3i) are far from being reversible. Under such conditions, it is not indifferent what econometric relationship is adopted for the targeted analytical and predictive simulations [wrp_i=c(i)+c(1i)*wrq_i or wrq_i=c(2i)+c(3i)*wrp_i]. A consistent choice would be possible in two situations:

- either there is an indubitable univocal causal relationship between wrp_i and wrq_i,
- or we admit that at least one of the regressed series can play the role of independent variable, since it was certainly registered without measurement errors.

2.3. Unfortunately, we are not in any of these situations.

- As we have already outlined, theoretically, the expression wrq=f(wrp) is equally valid as its symmetrical form wrp=f(wrq). In order to check statistically this assumption, the Granger causality test has been applied to these series (Appendix 5). The probability for “wrq does not Granger cause wrp” is less than 0.3 in 10 cases, while that for “wrp does not Granger cause wrq” surpasses this limit. In 19 cases the situation is converse (the first sentence has a probability higher than 0.3 and the second one has a lower level). Only two pairs have both probabilities higher than 0.3. For 53 pairs, these do not exceed 0.3, more than a half of them being less than 0.1. In our opinion, such results of a Granger causality test suggest that the tandem wrq-wrp represents rather an interdependent pair.
- On the other hand, it is obvious that the measurement errors affect both data series.

3. More adequate in such a situation seems to be the orthogonal regression (Malinvaud, 1964; Brooks and Boone, 2008; Calafiore, 2007; Castellaro and Bormann, 2007; Dissanaike and Wang, 2003; Dobrescu, 2004; Leng, Zhang, Kleinman, and Zhu, 2007; Saman, 2003; Schaefer and Visser, 2003; Serbinenko, 2002). This technique minimizes the orthogonal distance from the observed data points to the regression line. Consequently, it intrinsically observes the reversibility condition.

With the goal to algebraically demonstrate this feature, the slope in wrp=f(wrq) will be denoted by b_1 (that is wrp=a_1+b_1*wrq) and the slope in wrq=f(wrp) will be denoted by b_2 (respectively wrq=a_2+b_2*wrp). In the orthogonal regression, the coefficients b_1 and b_2 are determined as follows:

$$b_1=\{(\sigma_q^2-\sigma_p^2)+[(\sigma_q^2-\sigma_p^2)^2+4*\sigma_{pq}^2]^{\wedge}(1/2)\}/(2*\sigma_{pq}) \quad [III.1]$$

$$b_2=\{(\sigma_p^2-\sigma_q^2)+[(\sigma_p^2-\sigma_q^2)^2+4*\sigma_{pq}^2]^{\wedge}(1/2)\}/(2*\sigma_{pq}) \quad [III.2]$$

where:
σ_p^2 is the variance of wrp;
σ_q^2 – the variance of wrq; and
σ_{pq} represents their covariance.

Substituting
$A=(\sigma_q^2-\sigma_p^2)$ and
$B=[(\sigma_p^2-\sigma_q^2)^2+4*\sigma_{pq}^2]^{\wedge}(1/2)$, which is equivalent also to $[(\sigma_q^2-\sigma_p^2)^2+4*\sigma_{pq}^2]^{\wedge}(1/2)$, we have

$$b_1=\{A+B\}/(2*\sigma_{pq}) \quad [III.3]$$

$$b_2=\{-A+B\}/(2*\sigma_{pq}) \quad [III.4]$$

$$b_1*b_2=[(A+B)/(2*\sigma_{pq})]*[(-A+B)/(2*\sigma_{pq})]= =[(B+A)*(B-A)]/(2*\sigma_{pq})^2=(B^2-A^2)/(2*\sigma_{pq})^2 \quad [III.5]$$

which means

$$b_1*b_2=[(\sigma_p^2-\sigma_q^2)^2+4*\sigma_{pq}^2-(\sigma_q^2-\sigma_p^2)^2]/(2*\sigma_{pq})^2=(4*\sigma_{pq}^2)/(4*\sigma_{pq}^2)=1 \quad [III.6]$$

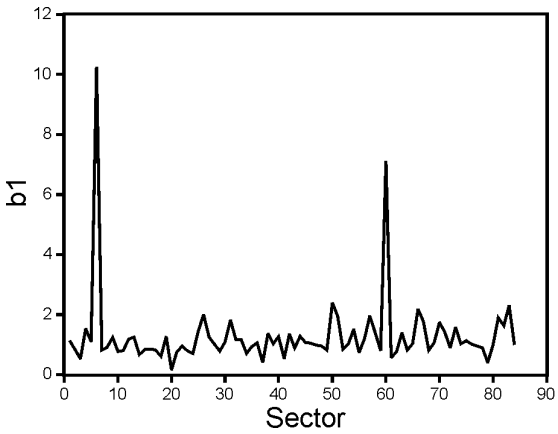
Due to this property, the orthogonal regression is preferable for cases (as the one here examined) in which the direction of causation is not clearly definable or the measurement errors in both series of variables are not excluded.

4. The computational results are synthetically presented in Appendix 7. In order to avoid possible confusions with other similar measures of interaction between the variables, we will name

- slope b1 as the orthogonal price elasticity to structural production shifts, and
- slope b2 (converse relationship) as the orthogonal production elasticity to the relative price changes.

4.1. The series of b1 is described in Graph b1.

Graph b1



A more expressive image can be obtained grouping the series b1 into five classes.

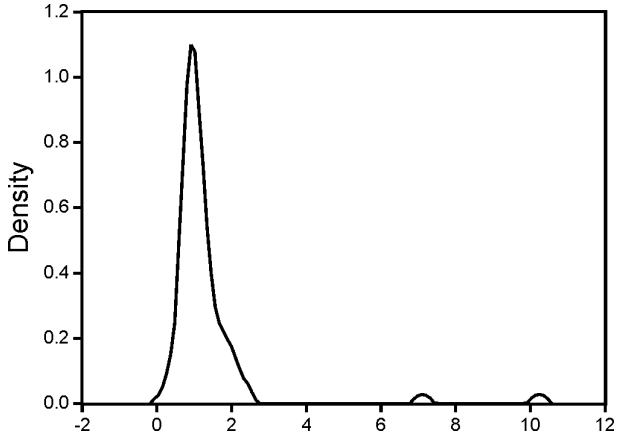
Table 3

Classes of b1

Orthogonal price elasticity to structural production shifts	Threshold of class	Number of cases
Very low	<0.7	8
Relatively low	0.7-0.9	22
Moderate	0.9-1.1	20
Relatively high	1.1-1.3	12
Very high	>1.3	22
Total		84

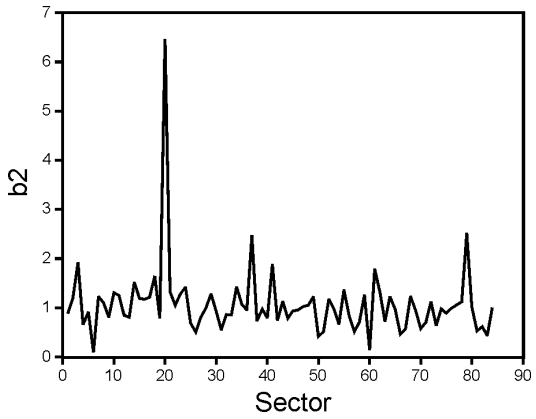
The Kernell density of b1 looks as follows:

Graph b1K



4.2. The series of b2 is presented in Graph b2.

Graph b2



Using the same classification with five groups, the following picture is obtained:

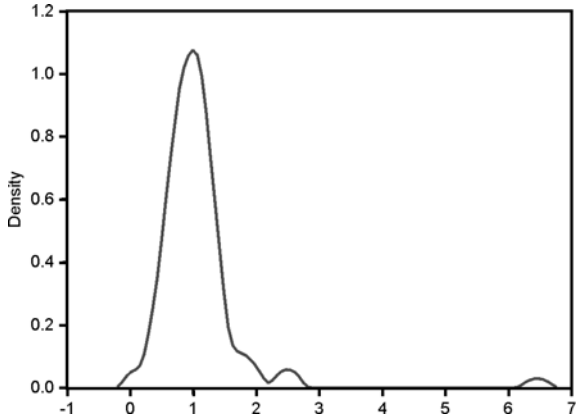
Table 4

Classes of b2

Orthogonal production elasticity to relative price changes	Threshold of class	Number of cases
Very low	<0.7	17
Relatively low	0.7-0.9	17
Moderate	0.9-1.1	20
Relatively high	1.1-1.3	16
Very high	>1.3	14
Total		84

The Kernell density of b2 is shown in Graph b2K.

Graph b2K



The mean of b1 is higher than of b2, which can be interpreted in the sense that the price elasticity to structural shifts is higher comparatively with the converse relationship.

5. One of the most important aspects of the examined problems is the real-nominal rigidity in economics.

- The slow price adjustment – the so-called price rigidity – is largely investigated in Keynesian and post-Keynesian economics. Usually, it is associated with the nominal wage rigidity. There are many papers that systematize the huge amount of literature dedicated to these questions. Among them, we mention some attempts undertaken during the last decade: Akerlof, Dickens, and Perry, 2000; Arseneau and S. K. Chugh, 2007; Baharad and Eden, 2003; Fehr and Goette, 2003; Holden and Wulfsberg, 2008; Kasuya, 1999; Kawaguchi and Ohtake, 2006; Koren, 2002; Lombardo, 2002; Ray, Wood, and Messinger, 2007; Roufagalas, 2006; Whelan, 2007.
- Several studies pay attention to quantity adjustments (Andersen; Hansen; Muller, Bergen, Dutta, and Levy).

The present paper covers both approaches:

a) on one hand, it examines the downward price rigidity under the changing relative prices; and

b) on the another hand, the reflex phenomenon - which could be named "downward output rigidity" - is also researched.

The statistical measuring questions are preponderantly discussed.

5.1. The first of them has, as a starting point, the econometric estimation of the relative prices:

$$wrp_{it}=a_{1i}+b_{1i}*wrq_{it} \qquad \text{[III.7] and}$$

$$rp_{it}=c_t*(a_{1i}+b_{1i}*wrq_{it})/w_{i(t-1)}=c_t*(a_{1i}/w_{i(t-1)}+b_{1i}*rq_{it}) \qquad \text{[III.8]}$$

where c_t is a correction coefficient. It is introduced in order to ensure the equality $\Sigma rp_{it}*wrq_{it}=1$. From

$$c_t*\Sigma(a_{1i}/w_{i(t-1)}+b_{1i}*rq_{it})*wrq_{it}=1 \qquad \text{[III.9] yields}$$

$$c_t=1/[\Sigma(a_{1i}/w_{i(t-1)}+b_{1i}*rq_{it})*wrq_{it}] \qquad \text{[III.10]}$$

Consequently, the price indices are defined as follows:

$$pit=ct*(a1i/wi(t-1)+b1i*rqit)*Pt \qquad \text{[III.11]}$$

The sectoral price indices π_{it} under $P_t=1$ (zero inflation) are expressed thus:

$$\pi it=ct*(a1i/wi(t-1)+b1i*rqit) \qquad \text{[III.12]}$$

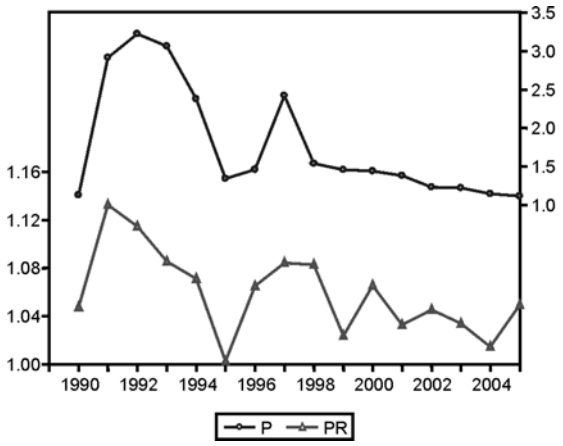
We introduce now the minimal price indices (p_{mit}). These are the lower prices at which the output can be sold. They are approximated taking into consideration the revealed behavior of suppliers, respectively in relation with the effectively practiced price indices (p_{it}). In our application, p_{mit} are equal to the weighted mean of $p_{jt}<1$; obviously, we could use the lowest individual level, but an average level seems more credible. If all $p_{it}>1$, the

hypothesis $p_{mit}=1$ is adopted. Finally, the sectoral price indices under downward price rigidity condition (p_{rit}) are defined using the following rule: $p_{rit}=\pi_{it}$ for $\pi_{it}>1$ and $=p_{mit}$ for $\pi_{it}<1$. The corresponding aggregate index (PR) is computed by

$$PRt=\Sigma prit*wrqit \qquad [III.13]$$

Graph P-PR presents the series PR_t comparatively with the registered deflators P_t in 1990-2005.

Graph P-PR



The downward price rigidity played, therefore, an important role during the Romanian transition, but the other determinants of inflation were decisive.

5.2. In the methodological framework adopted for the present paper, the output rigidity can be estimated beginning with the computation of wrq_{it} equations using both π_{it} and p_{rit} series of prices:

$$wrq\pi it=(a2i+b2i*wr\pi it) \qquad [III.14] \text{ and}$$

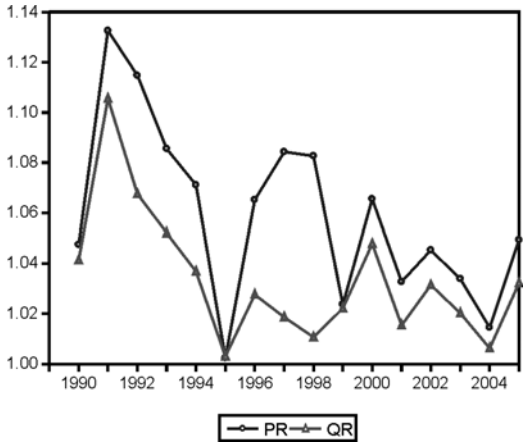
$$wrqrit=(a2i+b2i*wrprit) \qquad [III.15]$$

From each pair $wrq_{\pi rit}$-wrq_{rit} the higher level is chosen, thus obtaining a new series wrq_{hit}. The aggregate downward output rigidity (QR) is determined as a ratio

$$QRt=\Sigma wrqhit/\Sigma wrq\pi it \qquad [III.16]$$

Graph PR-QR confirms the powerful link between the downward price and output rigidities, implied as a matter of fact in the adopted methodology itself.

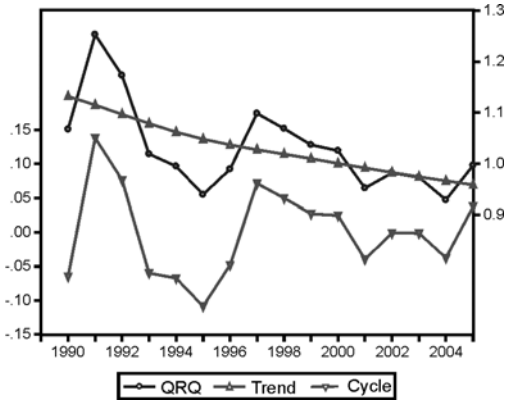
Graph PR-QR



Appendix 7 details the econometric coefficients of orthogonal regressions, price indices under zero aggregate inflation (π_{it}), price indices under downward price rigidity (pr_{it}), GVA indices under downward output rigidity (qr_{it}), and a synthesis for the overall economy.

5.3. Using the Hodrick-Prescott filter, the ratio QR_t/Q_t (denoted by QRQ) is shown in Graph HPQRQ:

Graph HPQRQ



The trend is descending, but it engrafts on significant cyclical oscillations.

5.4. The series QR_t must be cautiously interpreted. Using the chain-indices, as we have done until now, the real Q_t could be represented as a product of three components, that is the basic level (QE_t) compatible with π_{it} (zero aggregate inflation), the estimated index QR_t and the influence of other factors OF_t (including stochastic disturbances):

$$Q_t=QE_t*QR_t*OF_t \qquad [III.17]$$

The paper refers only to the second component, the other two (QE_t and OF_t) remaining so far unknown.

IV. Several Final Remarks

1. The main conclusion of the paper is that the downward price rigidity cannot be separated from the corresponding downward output rigidity. They represent an indestructible tandem. In other words, the downward price rigidity is intimately connected not only to the nominal wage low flexibility, but to the slow employment adjustments, too. This approach has many consequences, including the econometric estimations. From this point of view, the orthogonal regression is admitted as a more suitable method, but we do not exclude other algorithms as possible alternatives. It is crucial in this respect to ensure the numerical compatibility of relationships in which dependent and explanatory variables reciprocally change their position.

2. The minimal price level remains an open question, even for statistical analysis.

When all the price indices exceed unit, the problem does not seem too complicated. It is assumed that, under perfect competition and instantaneous adjustments, the modification of the sectoral structure of supply according to changes in the relative prices does not exclude zero aggregate inflation. The set of price indices π_{it} is estimated just on this premise. Consequently, in the situation discussed here, the hypothesis of minimal prices equal to unit cannot be rejected.

More disputable are the cases in which some sectoral prices exceed unit, while other register deflation. As an initial attempt, we have admitted as minimal the mean (normally weighted) of price indices less than unit. We must recognize that such a solution has been adopted intuitively. Supplementary researches (including sociological ones) are necessary in order to solve rationally this question.

3. Three components of the aggregate output index in real terms (Q_t) can be distinguished:

a) the basic level (QE_t) compatible with π_{it} (zero aggregate inflation);

b) the index QR_t proposed in this paper; and

c) the influence of other factors (OF_t), which incorporates again stochastic disturbances.

There is no need to outline the theoretical and practical importance of the autonomous quantification of QE_t. We are not sure that the standard interpretations of the equilibrium level of output would be sufficient, because of the explicit inter-conditioning of QE_t with π_{it} price indices (based on the assumption of zero inflation).

A decomposition of OF_t, with the separation of stochastic disturbances, would also be interesting.

4. We have exemplified the proposed methodology using relatively extended input-output tables (84 sectors). Such exercises are of course laborious; besides, they depend on the frequency of available information. A reduced nomenclature could be more accessible, inclusively for current needs.

However, the use of compacted classification must take into account the sectoral differences concerning the price elasticity to supply changes and its counterpart – the production elasticity to price changes. These differences are important and a non-homogenous (from this point of view) aggregation could essentially distort the results.

5. Our attempt has been limited to the illustration of the proposed methodology on statistical series. Adjusting it for predictive simulations represents an exciting future challenge.

References

Akerlof, G. A., W. T. Dickens, and G. L. Perry, (2000), "Near-Rational Wage and Price Setting and the Optimal Rates of Inflation and Unemployment", http://elsa.berkeley.edu/~akerlof/docs/inflatn-employm.pdf.

Andersen, T. M. (1995), "Adjustment Costs and Price and Quantity Adjustment", http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V84-41CXW90K&_user=10&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000050221&_version=1&_urlVersion=0&_userid=10&md5=40e81d0bcaa0f33fcbc03abcfbf8d86a Copyright © 1995 Published by Elsevier Science B.V.

Arseneau, D. M. and S. K. Chugh, (2007), "Bargaining and Price Rigidity in a DSGE Environment", https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=NASM2007&paper_id=743.

Bagnoli, P., J. Château, and S. Sahin, (2006), "Structural Changes and PPP Measures of Income", January, Draft for Comment, http://www.oecd.org/dataoecd/49/6/35932675.pdf.

Baharad, E. and B. Eden, (2003), "Price Rigidity and Price Dispersion: Evidence from Micro Data", http://www.vanderbilt.edu/econ/faculty/Eden/baharad-eden14_8_03.pdf.

Balke, N. S. and M. A. Wynne, (1996), "Supply Shocks and the Distribution of Price Changes". Federal Reserve Bank of Dallas Economic Review, pp. 10-18.

Ball, L. and N. G. Mankiw, (1995), "Relative Price Changes as Aggregate Supply Shocks". *Quarterly Journal of Economics*, pp. 161-193.

tivariate Orthogonal Regression", *SciDAC 2007 IOP Publishing Journal of Physics*: *Conference Series* 78 (2007) 012084 doi:10.1088/1742-6596/78/1/012084

http://ieeexplore.ieee.org/xpl/freeabs_all.jsp?tp=&arnumber=895890&isnumber=19398.

Castellaro, S. and P. Bormann, (2007), „Performance of Different Regression Procedures on the Magnitude Conversion Problem", *Bulletin of the Seismological Society of America;* August; ,97(4): 1167-1175, http://bssa.geoscienceworld.org/cgi/content/abstract/97/4/1167.

Coorey, A., M/ Mecagni, and E. Offerdal, (1998), "Achieving Low Inflation in Transition Economies. TheBaumol, W., S. Blackman and E. Wolff, (1985), "Unbalanced Growth Revisited: Asymptotic Stagnancy and New Evidence", American Economic Review, 75: 806-817.

Bezdek, R. G. and R. M. Wendling (1976): "Disaggregation of Structural Change in the American Economy: 1947-1966", US. Energy Research and Development Administration, and Bureau of Economic Analysis, U.S. Department of Commerce, Washington, D.C., 167.pdf.

Bomberger, W. A. and G. E. Makinen, (1993), "Inflation and Relative Price Variability: Parks' Study Reexamined", Journal of Money, Credit, and Banking 25(4): 854-861, http://ideas.repec.org/a/mcb/jmoncb/v25y1993i4p854-61.html.

Brooks, J. P. and E. L. Boone, (2008), "Robust L1 Orthogonal Regression", Department of Statistical Sciences and Operations Research, Virginia Commonwealth University, January, http://www.people.vcu.edu/~jpbrooks/research/brooksboone.pdf

Caglayan, M. and A. Filiztekin, (2003), "Nonlinear Impact of Inflation on Relative Price Variability", Economics Letters, 79: 213-218.

Calafiore, G.C. (2007), "Outliers Robustness in Mul Role of Relative Price Adjustment", http://www.worldbank.org/fandd/english/0398/articles/070398.htm.

Cretengy, L, (2005), "Analysing Economic Structural Change in a General Equilibrium Framework: The case of Switzerland from 1990 to 2001", Ecoplan, Switzerland and Centre of Policy Studies Monash University, General Working Paper No.G-155, May 2005, g-155.pdf. This paper has been prepared for presentation at the 8th Annual Conference on global Economic Analysis, Lübeck, Germany, June 9-11.

Dissanaike G. and S. Wang, (2003), "A Critical Examination of Orthogonal Regression and an Application to Tests of Firm Size Interchangeability", http://les1.man.ac.uk/sapcourses/Semstuff/Ort-wang.PDF.

Dobrescu, E. (1999), "Core Inflation in a Transition Economy (The Romanian Case)", "Proceedings of the Measurement of Inflation Conference", Cardiff University, August 31– September 1, 1999, Editors:M.Silver and D. Fenwick, pp.206-223.

Dobrescu, E. (2004), "Double Conditioned Potential Output", Paper for the 28th General Conference of The International Association for Research in Income and Wealth, Cork, Ireland, August 22 – 28, 2004; published in Romanian Journal of Economic Forecasting, No.1 2006, pp. 32-50.

Evans, G. W. and G. Ramey, (2001), "Adaptive Expectations, Underparameterization and the Lucas Critique", Department of Economics, UCSD (University of California, San Diego), Paper 2001-11, http://repositories.cdlib.org/cgi/viewcontent.cgi?article=1131&context=ucsdecon.

Fehr, E. and L. Goette, (2003), "Robustness and Real Consequences of Nominal Wage Rigidity", Institute for Empirical Research in Economics, University of Zurich, Working Paper No. 44, http://www.iew.unizh.ch/wp/iewwp044.pdf.

Fielding, D. and P. Mizen, (2000), "Relative Price Variability and Inflation in Europe", Economica. Volume 67, Number 265, February, pp. 57-78.

Fischer, S., Editor, (1980), "Rational Expectations and Economic Policy", University of Chicago Press, http://www.nber.org/chapters/c6264. Contributions of S. Fischer, H. I. Grossman, R. J. Barro and Mark Rush, O. J. Blanchard, R. J. Shiller, F. Kydland and E. C. Prescott, R. E. Lucas Jr., R. M. Solow, W. Poole.

Hansen, P. S. (1996), "Quantity Adjustment Costs and Price Rigidity", http://papers.ssrn.com/sol3/papers.cfm?abstract_id=56006.

Holden, S. and F. Wulfsberg, (2008), "Downward Nominal Wage Rigidity in the OECD", http://folk.uio.no/sholden/dnwr.pdf.

International Monetary Fund, (1997), "Designing Disinflation Programs in Transition Economies: The Implications of Relative Price Adjustment", IMF Paper on Policy Analysis and Assessment 97/1.

Kasuya, M. (1999), "Downward Price Rigidity of the Japanese CPI - Analysis by Probability Density Functions and Spatial Density Functions", Working Paper 99-3, Research and Statistics Department, Bank of Japan http://www.boj.or.jp/en/type/ronbun/ron/wps/kako/data/cwp99e03.pdf.

Kawaguchi, D. and F. Ohtake, (2006), "Testing the Morale Theory of Nominal Wage Rigidity", Suntory Foundation, Grant-in-aid for Scientific Research (grant number (B)(2) 12124207,(C)(2)14530109 and Youth (B) 16730161), and the 21st century COE program (Osaka University and Hitotsubashi University), http://people.colgate.edu/tkato/nominal%20wage%20Kawaguchi%20ohtake.pdf.

Kohn, D. L. (2008), "Lessons for Central Bankers from a Phillips Curve Framework", Federal Reserve Bank of Boston's 53rd Annual Economic Conference, Chatham, Massachusetts, June, FRB Kohn, Lessons for Central Bankers from a Phillips Curve Framework.mht.

Koren, M. (2002), "Long-term Relationships, Search, and the Optimal Degree of Price Rigidity", Harvard University, Department of Economics. Cambridge, Massachusetts,

http://www.eea-esem.com/papers/eea-esem/eea2002/2297/rigidity3.pdf.

Kuznets, S. (1966), "Modern Economic Growth: Rate, Structure and Spread". New Haven and London: Yale University Press, 529 pp.

Laidler, D. (2003), "The Price Level, Relative Prices and Economic Stability: Aspects of the Interwar Debate", BIS Working Papers, No. 136, Basel, Bank for International Settlements, September.

Laitner, J. (2000), "Structural Change and Economic Growth", Review of Economic Studies, 67: 545-561.

Leng, L., T. Zhang, L. Kleinman, and W. Zhu, (2007), "Ordinary Least Square Regression, Orthogonal Regression, Geometric Mean Regression and their Applications in Aerosol Science", Journal of Physics - Conference Series, http://www.iop.org/EJ/article/1742-6596/78/1/012084/jpconf7_78_012084.pdf?request-id=a81fd9dd-462c-47d8-9ccf-2f8a5c858b19

Lindmark, M. and L. F. Andersson, (2007), "Productivity Growth, Structural Change and Relative Price Divergence in Sweden 1850-2000", Department of Economic History, Umeå University, http://www.ekh.lu.se/ehes/paper/Andersson%20&%20Lindmark,%20Productivity%20growth%20structural%20change%20and%20relative%20price%20divergence.pdf.

Lombardo, G. (2002), "Price Rigidity, the Mark-up and the Dynamics of the Current Account", Discussion paper 14/02, Economic Research Centre of the Deutsche Bundesbank, http://217.110.182.54/download/volkswirtschaft/dkp/2002/200214dkp.pdf.

Maddison, A., (2001), "The World Economy: A Millennial Perspective". OECD Development Centre, Paris.

Malinvaud E. (1964), Methodes statistiques de l'econometrie, DUNOD, Paris.

Muller, G., M. Bergen, S. Dutta, and D. Levy, (2007), "Non-price Rigidity and Cost of Adjustment", Managerial and Decision Economics, 28: 817–832, Published online in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/mde.1379, http://carlsonschool.umn.edu/assets/106176.pdf.

National Institute of Statistics – Romania (2008): "1998-2007", https://statistici.insse.ro/shop/index.jsp?page=tempo3&lang=en&ind=CON101A.

Nautz, D. and J. Scharff, (2006), "Inflation and Relative Price Variability in the Euro Area: Evidence From a Panel Threshold Model",: http://opus.zbw-kiel.de/volltexte/2006/4250/pdf/200614dkp.pdf.

Discussion Paper, Series 1: Economic Studies No 14/2006, Deutsche Bundesbank, Frankfurt am Main.

Ngai, L. R. and C. A. Pissarides, (2004), "Balanced Growth with Structural Change", Centre for Economic Performance - London School of Economics and CEPR, March, http://cep.lse.ac.uk/seminarpapers/11-05-04-NGA.pdf

Oulton, N. (1999), "Must the Growth Rate Decline? Baumol's Unbalanced Growth Revisited", Centre for Economic Performance - London School of Economics, The Bank of England, Working Paper Series No. 107.

Ratfai, A. (2001), "Relative Price Skewness and Inflation: A Structural VAR Framework", KTK/IE Discussion Papers 2001/3, mtdp0103.pdf, Institute of Economics Hungarian Academy of Sciences.

Ray, S., C. Wood, and P. Messinger, (2007), "Differing Patterns of Downward Price Rigidity for Multi-Component Systems: Theory and Evidence", http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1021421#PaperDownload.

Roufagalas, J. (2006), "Aggregate Price Rigidity as a Result of Firm Exit", Radford University, http://www.runet.edu/~jroufaga/Papers/PRICE%20RIGIDITY%20S06.pdf.

Sâman C. (2003), "The Total Least Squares: Computational and Statistical Aspects and Algorithms", Romanian Journal of Economic Forecasting, 7(3) : 107-117.

Schaefer, K. C. and M. L. Visser, (2003), "Reverse Regression and Orthogonal Regression in Employment Discrimination Analysis", Journal of Forensic Economics 16(3), pp. 283-298, http://www.nafe.net/jfe/j16_3_03.pdf.

Sargent, T. J. (1993, 2002), "Rational Expectations", The Concise Encyclopedia of Economics (CEE), Content ©: 1993, 2002 David R. Henderson, http://www.econlib.org/library/Enc/RationalExpectations.html.

Semerák, V. (2006), "Structural Changes in CEE Countries", Institute of Economic Studies, Charles University, Prague, November 24, 110_semerak_presentace[2].ppt.

Serbinenko, A. (2002), "The close formula for the orthogonal L2 regression", http://www.serbinenko.info/files/regr_orth.pdf.

The MathWorks Statistics Toolbox™ 6.2 (2008): "Fitting an Orthogonal Regression Using Principal Components Analysis", http://www.mathworks.com/products/statistics/demos.html?file=/products/demos/shipping/stats/orthoregdemo.html.

van der Linden, J, A. and E. Dietzenbacher, (1999), "The Determinants of Structural Change in the European Union: A New Application of RAS", Department of Economics, University of Groningen, SOM-theme D: Structural Change and Long-term Development, http://som.eldoc.ub.rug.nl/FILES/reports/1995-1999/themeD/1995/95D36/95d36.pdf.

Whelan, K. (2007), "New-Keynesian Models of Price Rigidity", http://www.karlwhelan.com/Teaching/PhD/part7.pdf.

Appendix 1 – The structure of the input-output tables

1A. Official classification of 105 branches (Romanian National Institute of Statistics - RNIS)

Code RNIS	Label
1	Vegetable production
2	Livestock breeding
3	Auxiliary services
4	Forestry and hunting
5	Logging
6	Fish farming and fishing
7	Coal mining and preparation (bituminous shale included)
8	Extraction of crude oil (included service activities incidental)
9	Extraction of natural gas (included service activities incidental)
10	Extraction of radioactive ores
11	Extraction and preparation of ferrous metals
12	Extraction and preparation of rare non-ferrous metals
13	Quarrying of stone
14	Quarrying of sand and clay
15	Mining of chemical minerals
16	Extraction and preparation of salt
17	Extraction and preparation of non-ferrous metals
18	Production, processing and preserving of meat and meat products
19	Processing and preserving of fish and fish products
20	Processing and preserving of fruit and vegetables
21	Manufacture of vegetable and animal oils and fats
22	Manufacture of dairy products
23	Manufacture of grain mill products, starches and starch products
24	Manufacture of prepared animal feeds
25	Manufacture of other food products
26	Beverages
27	Tobacco
28	Textiles and textile product
29	Textiles wearing apparel
30	Fur and leather wearing apparel
31	Leather goods and footwear
32	Wood processing (excluding furniture)
33	Pulp, paper and cardboard and paper products
34	Publishing houses, printing, recording and copying
35	Coal coking
36	Crude oil processing
37	Processing of nuclear fuels

Code RNIS	Label
38	Manufacture of basic chemicals
39	Manufacture of pesticides and other agro-chemical products
40	Manufacture of paints and varnishes
41	Manufacture of pharmaceuticals and medicinal chemicals
42	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
43	Manufacture of other chemical products n.e.s.
44	Manufacture of man-made fibers
45	Manufacture of rubber products
46	Manufacture of plastic products
47	Manufacture of glass and glass products
48	Manufacture of non-refractory ceramic goods other than for construction purposes; manufacture of refractory ceramic products
49	Manufacture of ceramic tiles and flags
50	Manufacture of bricks, tiles and construction products, in baked clay
51	Manufacture of cement, lime and plaster
52	Manufacture of articles of concrete, plaster and cement
53	Cutting, shaping and finishing of ornamental and building stone
54	Manufacture of other non-metallic mineral products n.e.s.
55	Metallurgy and production of ferrous – alloy
56	Manufacture of tubes
57	Other metallurgical products
58	Manufacture of basic precious and non-ferrous metals
59	Casting of metals
60	Metallic construction and metal products
61	Manufacture of machinery for the production and use of mechanical power
62	Manufacture of general purpose machinery
63	Manufacture of agricultural and forestry machinery
64	Manufacture of machine tools
65	Manufacture of other special purpose machinery
66	Manufacturing of armament, ammunition
67	Manufacture of domestic appliances
68	Computers and office means
69	Electrical machinery and appliances
70	Radio, T.V. and communications equipment and apparatus
71	Medical, precision, optical, watch-making instruments and apparatus
72	Means of road transport
73	Building and repairing of ships and boats
74	Manufacture of railway and tramway locomotives and rolling stock
75	Manufacture of aircraft and spacecraft
76	Manufacture of motorcycles and bicycles
77	Furniture production
78	Other industrial activity

Code RNIS	Label
79	Production and distribution of electric power
80	Production and distribution of gas (excl. methane extraction)
81	Production and distribution of thermal power and water
82	Water collection, treatment and distribution
83	Constructions
84	Wholesales and retail trade
85	Hotels
86	Restaurants
87	Transport via railways
88	Other transports
89	Transport via pipelines
90	Water transport
91	Air transports
92	Supporting and auxiliary transport activities; activities of travel agencies
93	Activities of travel agencies and tour operators; tourist assistance activities n.e.s.
94	Post and courier activities
95	Telecommunications
96	Financial, banking and insurance activities
97	Real estate activities
98	Computer and related activities
99	Research and development
100	Architectural and engineering activities and related technical consultancy
101	Miscellaneous business activities
102	Public administration and defense; compulsory social security
103	Education
104	Health and social security
105	Other community, social and personal service activities Financial intermediation services indirectly measured (FISIM)

1B. Author's classification of 84 sectors

Code RNIS*	Paper's Code	Label
1	1	Vegetable production
2	2	Livestock breeding
3	3	Auxiliary services
5	4	Logging
4+6	5	Forestry, hunting, fish farming, and fishing
7+9+(11...17)	6	Mining industries (without extraction of crude oil)
18+19	7	Production, processing and preserving of meat and fish products
20	8	Processing and preserving of fruit and vegetables
21	9	Manufacture of vegetable and animal oils and fats
22	10	Manufacture of dairy products
23	11	Manufacture of grain mill products, starches and starch products
24	12	Manufacture of prepared animal feeds
25	13	Manufacture of other food products
26	14	Beverages
27	15	Tobacco
28	16	Textiles and textile product
29	17	Textiles wearing apparel
30	18	Fur and leather wearing apparel
31	19	Leather goods and footwear
32	20	Wood processing (excluding furniture)
33	21	Pulp, paper and cardboard and paper products
34	22	Publishing houses, printing, recording and copying
35	23	Coal coking
8+36+38	24	Oil extraction and processing, manufacture of basic chemicals
39	25	Manufacture of pesticides and other agro-chemical products
40	26	Manufacture of paints and varnishes
41	27	Manufacture of pharmaceuticals and medicinal chemicals
42	28	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
43	29	Manufacture of other chemical products n.e.s.
44	30	Manufacture of man-made fibers
45	31	Manufacture of rubber products
46	32	Manufacture of plastic products
47	33	Manufacture of glass and glass products
48	34	Manufacture of non-refractory ceramic goods other than for construction purposes; manufacture of refractory ceramic products
49	35	Manufacture of ceramic tiles and flags
50	36	Manufacture of bricks, tiles and construction products, in

Code RNIS*	Paper's Code	Label
		baked clay
51	37	Manufacture of cement, lime and plaster
52	38	Manufacture of articles of concrete, plaster and cement
53	39	Cutting, shaping and finishing of ornamental and building stone
54	40	Manufacture of other non-metallic mineral products n.e.s.
55	41	Metallurgy and production of ferrous – alloy
56+57+58	42	Tubes, other metallurgical products, manufacture of basic precious and non-ferrous metals
59	43	Casting of metals
60	44	Metallic construction and metal products
61	45	Manufacture of machinery for the production and use of mechanical power
62	46	Manufacture of general purpose machinery
63	47	Manufacture of agricultural and forestry machinery
64	48	Manufacture of machine tools
65	49	Manufacture of other special purpose machinery
67	50	Manufacture of domestic appliances
68	51	Computers and office means
69	52	Electric machinery and appliances
70	53	Radio, T.V. and communications equipment and apparatus
71	54	Medical, precision, optical, watch-making instruments and apparatus
72	55	Means of road transport
73	56	Building and repairing of ships and boats
74	57	Manufacture of railway and tramway locomotives and rolling stock
75	58	Manufacture of aircraft and spacecraft
76	59	Manufacture of motorcycles and bicycles
77	60	Furniture production
78	61	Other industrial activity
79+80+81+82	62	Production and distribution of electric power, gas (excl. methane extraction), thermal power, and water
83	63	Constructions
84	64	Wholesale and retail trade
85	65	Hotels
86	66	Restaurants
87	67	Transport via railways
88	68	Other transports
89	69	Transport via pipelines
90	70	Water transport
91	71	Air transports
93	72	Activities of travel agencies and tour operators; tourist assistance activities n.e.s.

Code RNIS*	Paper's Code	Label
94	73	Post and courier activities
95	74	Telecommunications
96	75	Financial, banking and insurance activities
97	76	Real estate activities
98	77	Computer and related activities
99	78	Research and development
100	79	Architectural and engineering activities and related technical consultancy
101	80	Miscellaneous business activities n.e.s.
102	81	Public administration and defense; compulsory social security
103	82	Education
104	83	Health and social security
105	84	Other community, social and personal service activities Financial intermediation services indirectly measured (FISIM)

**The branches 10, 37, 66, and 92 have been excluded.*

Appendix 2 - Statistical data

2A. The annual index of the gross value added (q_{it})

Sector	1990	1991	1992	1993	1994	1995	1996	1997
1	2.0644	1.0126	0.8289	1.1801	1.0493	1.0145	1.0058	1.0378
2	0.9802	0.7343	1.032	1.0475	0.9428	1.1812	0.8256	0.8568
3	1.5882	0.755	1.0025	1.096	1.0412	1.0046	0.8608	0.7337
4	0.8703	0.7228	0.8433	0.9569	1.0348	1.0445	1.0039	0.8048
5	0.9736	0.742	1.012	0.8918	1.0199	1.0223	0.9964	1.0217
6	0.2813	0.916	0.7885	1.0171	0.9825	0.9997	0.7671	0.5762
7	1.1762	0.8281	0.9513	0.9168	1.0508	1.1674	1.114	0.926
8	1.062	0.8451	2.0463	1.0532	1.0117	1.2469	1.1834	1.1138
9	1.901	1.0789	1.091	1.0117	0.7855	1.19	1.2976	0.8237
10	0.93	0.9744	0.8313	1.0737	1.1175	1.0671	1.1143	1.0891
11	1.6357	0.853	1.182	1.214	0.757	1.1716	1.46	0.8622
12	1.2357	1.048	0.7464	0.908	0.9273	0.5933	1.0561	0.8733
13	0.8898	0.8752	0.9114	0.8993	1.0005	1.0198	1.4197	0.8797
14	0.9242	0.9969	1.0111	0.9485	1.0597	1.3082	1.2459	0.9866
15	1.6847	0.4494	0.8534	0.9998	0.7793	0.8952	0.9518	1.0098
16	0.8962	0.9587	0.7359	0.9952	1.0022	1.0407	1.1848	0.9222
17	0.7979	0.9893	0.9932	0.7941	1.3424	1.093	1.1506	1.0386
18	1.2146	0.9102	0.9277	0.826	0.9754	1.0394	1.0208	1.0541
19	0.7677	0.868	0.8763	0.8905	0.8598	1.0266	1.2293	0.8834
20	0.66	0.8788	1.0442	0.8852	1.0616	1.0043	1.4605	0.8541
21	1.0585	0.4833	0.8491	0.9208	0.9572	1.1628	1.2357	0.8087
22	0.9033	0.8823	1.2964	0.945	1.272	1.0316	1.2886	0.9458
23	1.1199	0.6931	1.0041	1.7481	0.9048	0.9869	1.2742	0.9921
24	0.6405	1.0072	0.9654	1.1819	1.1213	1.0403	1.001	0.9168
25	0.1214	1.9117	1.2685	1.111	0.9224	1.101	0.8118	0.4583
26	0.9647	0.9743	0.891	0.7415	0.6828	0.9559	0.6692	0.7962
27	0.5827	1.0491	1.0857	0.9875	0.9343	0.9462	0.9523	0.7666
28	1.1788	0.9084	0.9733	1.0104	0.8882	0.8877	0.8487	0.9353
29	1.1684	0.8492	0.7697	1.0049	0.9548	1.0317	0.8619	0.765
30	0.9475	0.9085	0.9589	0.8428	0.9127	1.0818	1.0642	0.7918
31	13.937	0.7393	0.8848	1.063	0.8448	1.0727	1.1115	0.7549
32	0.9041	0.7608	0.6841	0.9539	0.8775	1.0152	1.0319	0.9197
33	0.7638	0.975	1.0622	0.7822	0.9417	1.3047	1.1118	0.9421
34	0.6188	0.8423	0.9535	1.0235	0.9878	1.182	1.6411	0.831
35	0.5074	0.9091	0.8821	0.993	1.0435	1.2797	1.0056	0.8808
36	0.6167	0.9429	1.711	1.45	1.194	1.2487	0.9457	0.7827
37	0.9428	0.7171	0.9649	1.0236	0.977	1.1312	1.0262	0.9435
38	0.8925	0.7453	0.7933	0.7643	0.7569	0.7204	0.8694	0.85
39	1.4884	0.783	0.95	0.9427	0.9686	0.5891	0.476	0.697
40	0.6111	0.669	0.9335	1.6302	0.9019	1.0223	1.0311	0.8096
41	1.0932	0.6363	0.8859	0.9727	1.1602	1.0074	1.3605	0.9279
42	0.5707	1.1967	0.6058	0.9568	1.035	1.035	1.0025	0.9637
43	0.9152	0.8902	0.7515	0.6988	1.0413	1.0993	0.8948	0.9385
44	0.7454	0.8115	0.8144	0.8868	1.0065	1.0045	1.051	0.9622
45	0.8997	0.829	0.8143	0.7393	0.9392	1.1362	1.0432	0.901

Sector	1990	1991	1992	1993	1994	1995	1996	1997
46	0.8561	0.8102	0.5671	0.9161	1.0056	0.9349	0.5225	0.9198
47	1.7505	0.5445	0.816	1.0064	1.0064	1.005	0.8942	0.6292
48	0.8656	0.6566	0.7289	0.772	0.889	0.8456	0.6895	0.9337
49	1.0004	0.7417	0.9582	0.7116	0.993	1.0503	0.9154	0.9016
50	1.06	0.8448	0.7684	0.4978	0.9821	1.2011	1.1428	0.841
51	0.5886	0.6562	0.5916	1.8179	1.0372	1.1998	1.514	0.9533
52	0.9006	0.7077	0.7384	0.7243	1.5973	1.2778	1.0809	1.0072
53	0.7271	0.8804	0.5904	1.2431	1.3318	1.015	1.0384	1.0377
54	0.8403	0.4066	0.6682	0.9057	0.8924	1.0064	0.6182	0.9438
55	0.8816	1.3888	0.8102	0.9916	0.9683	1.07	1.2394	0.9849
56	0.8476	0.6926	1.2704	0.5756	0.9393	1.262	1.03	0.9618
57	0.5025	0.8258	0.7253	1.0761	0.7264	0.8241	1.7056	0.9453
58	0.6096	0.9425	0.4512	1.1277	0.9052	0.8036	1.0539	1.0142
59	1.3541	0.8111	0.6784	0.5114	1.4224	0.6746	0.8811	0.6444
60	0.5791	0.9053	0.9816	1.098	1.1707	1.0944	1.0746	0.9595
61	1.1135	0.984	0.698	0.6675	1.3621	1.0038	0.7385	1.1156
62	0.6951	2.8023	0.9645	1.4026	1.0832	1.0227	0.8784	0.8106
63	1.0105	0.8063	0.9437	1.2469	1.2736	1.0675	1.0081	0.807
64	1.0432	0.7452	0.9055	0.9298	1.0321	1.1887	1.0714	0.9083
65	1.1365	0.7223	1.0182	0.9315	0.9359	2.1297	1.5914	0.8852
66	1.4019	0.6794	0.9573	0.7283	0.7297	1.0028	1.0651	0.6977
67	0.8643	0.7734	0.8933	0.8404	0.9426	0.9761	0.9855	0.8847
68	0.7835	0.8903	0.9983	1.1461	0.9538	0.9972	1.0987	0.9306
69	0.868	0.8962	0.7863	0.9657	1.092	1.0932	0.8951	0.8581
70	0.4817	0.5146	0.6257	0.6313	1.452	1.095	0.9173	0.6318
71	0.8206	0.8799	1.5678	0.9085	1.2691	1.0016	0.6381	0.7981
72	1	1.1382	0.4988	1.5035	1.0633	1.1634	1.1097	0.8243
73	0.7989	1.8232	1.0571	1.0632	1.3439	1.0181	1.2841	0.9543
74	0.8144	1.2944	1.0897	1.257	1.0509	1.0747	1.3249	0.9895
75	1.1732	0.9971	1.3965	1.0054	1.0167	1.0135	0.8576	0.7738
76	1.051	1.0503	2.4372	1.0507	1.1394	1.0642	0.9971	1.0047
77	1.0214	1.202	0.9886	0.9323	0.9792	1.0157	1.6508	0.8481
78	0.7899	1.0248	0.8518	0.7226	1.0194	1.1226	0.988	0.8614
79	1.1236	0.9814	1.0848	0.7878	0.8843	1.0632	1.1083	0.9023
80	1.1272	2.3631	0.7316	2.1173	1.017	1.2344	1.3267	0.8281
81	1.1397	0.9199	1.1081	1.0189	1.0966	1.0444	0.9287	0.9677
82	1.0543	1.165	0.9924	1.0345	1.0034	1.0345	1.1003	0.9062
83	1.244	0.9799	0.972	1.022	1.0909	1.027	1.0945	0.8812
84	1.1356	0.7689	0.8802	0.9622	1.1553	1.1448	1.2727	0.9624
Total	0.9757	0.8824	0.9103	1.0329	1.0425	1.0677	1.0391	0.9274

2A. The annual index of the gross value added (q_{it}) – continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005	Average 1990-2005
1	0.8417	1.0932	0.7745	1.3575	0.8981	1.0796	1.2476	0.8071	1.0489
2	1.1355	0.8916	0.9836	1.0503	1.0396	0.9555	0.9956	0.8869	0.9647
3	0.7874	1.0219	0.7055	1.1873	1.024	1.0738	0.9246	0.9612	0.9658
4	0.9975	1.2192	1.0544	0.9415	1.0353	0.9436	1.1949	0.7831	0.9563
5	0.9992	0.9312	1.1631	1.024	1.0904	1.0849	0.8995	1.065	0.9913
6	1.0017	1.4131	1.0923	1.1324	0.959	0.9886	1.0478	0.9447	0.8872
7	0.9882	1.1688	1.0787	1.1685	1.0044	1.0601	1.1382	0.9655	1.0385
8	0.9126	0.7464	1.0759	1.0079	1.0123	1.2557	1.3653	0.998	1.0924
9	0.8632	0.9193	1.0395	0.9266	1.1048	0.8438	1.1242	0.9801	1.0365
10	0.9036	0.8571	0.9926	1.3543	1.1092	1.0575	1.0854	1.0564	1.0314
11	0.9037	1.0796	1.6671	0.9954	1.3024	1.5771	1.0585	0.8866	1.1291
12	0.9788	0.6642	1.1852	0.3521	1.1129	1.1919	0.9423	0.9879	0.8879
13	0.8618	0.9868	1.346	1.0958	1.0706	1.0511	1.0703	1.0855	1.0182
14	0.9255	0.6513	1.0506	1.3707	0.9792	1.3167	0.9512	1.0839	1.0351
15	0.9025	0.3936	1.113	1.0254	0.9199	0.9955	0.8543	0.7494	0.8675
16	0.9277	0.9812	1.035	0.9769	1.0709	1.0452	1.0422	0.9396	0.98
17	0.9151	1.0797	1.1966	1.097	1.0416	1.0146	1.0121	0.9509	1.023
18	0.9747	0.8361	0.9997	1.4135	1.0677	1.0283	0.9886	0.9917	1.0085
19	0.9907	1.0419	1.2638	1.0044	1.0389	1.0287	0.9978	0.9508	0.9746
20	0.9244	1.2142	1.0785	1.0228	1.0571	1.0546	1.2158	1.0377	1.0136
21	0.9741	1.1308	1.1527	1.0865	1.2157	0.9944	1.0052	1.0359	0.984
22	0.9564	1.2794	1.0599	1.1949	1.0898	1.0331	1.1257	1.087	1.0782
23	0.9249	0.5043	1.0814	0.9241	1.01	1.0535	1.1026	0.1823	0.8894
24	0.9835	0.8748	1.0368	0.8812	1.0836	1.01	1.0226	1.0665	0.9813
25	0.9304	0.7962	1.0398	0.7774	0.7915	1.1089	1.164	0.8354	0.8415
26	0.9993	1.2077	1.0837	1.0948	1.0072	0.9567	0.9985	1.1627	0.9358
27	0.9964	1.0555	1.0201	1.0165	1.0809	1.0259	1.0323	1.0689	0.9649
28	0.963	0.9222	0.8874	0.9643	1.2173	1.0941	1.1264	1.0143	0.9832
29	0.9557	0.8514	0.8893	1.1527	0.9981	0.941	1.0249	0.8404	0.9342
30	0.8396	0.9349	0.9315	1.0168	1.0946	0.9162	1.0008	1.0454	0.9515
31	0.9977	0.9015	0.8632	1.1243	1.1083	1.2346	1.0483	0.9583	1.1459
32	0.9981	1.1115	1.3685	1.1998	1.1075	1.1211	1.1366	1.0956	1.0041
33	0.9292	0.8953	1.0294	1.0169	1.1129	0.926	1.1088	0.9552	0.9827
34	0.9987	0.9902	0.9884	1.0036	1.0232	1.0213	1.0449	0.9105	0.9854
35	0.9954	1.2313	1.3512	1.0006	0.8099	1.0856	1.1359	0.8728	0.9771
36	0.9993	0.9137	1.0268	1.2129	0.8502	0.9361	1.0971	1.0313	1.031
37	0.9981	0.9989	1.0073	0.9693	1.0806	0.8923	1.1541	0.992	0.9836
38	1.0038	1.0149	0.9941	1.012	1.1206	1.0619	1.1873	1.0373	0.9156
39	1.0185	1.1193	1.542	1.0628	1.0875	1.0612	1.2182	1.5859	0.9879
40	0.9709	0.7571	0.9319	1.0783	0.9953	1.0581	1.1347	0.9429	0.9441
41	0.9797	0.7022	1.1347	0.97	1.1426	0.8002	1.2856	0.9605	0.9827
42	0.95	0.6961	1.3283	1.1022	0.9301	0.8558	1.0089	0.9968	0.9308
43	0.7545	0.7281	1.0963	0.9779	1.2062	0.7803	1.0014	1.1921	0.9219
44	0.9818	1.0335	1.031	1.1112	1.0499	0.859	1.11	1.0832	0.9647
45	0.964	0.9417	1.4996	1.0176	0.9121	0.967	0.9677	0.9308	0.9571

Sector	1998	1999	2000	2001	2002	2003	2004	2005	Average 1990-2005
46	0.5124	1.0064	1.4857	0.887	0.9766	1.0564	1.3533	1.156	0.8979
47	0.9666	0.7588	0.8752	0.9404	1.2334	0.617	1.054	0.8338	0.8983
48	0.9953	0.6897	1.0328	0.9817	1.1231	1.0461	1.0994	1.2094	0.8946
49	0.9249	0.9766	0.9199	1.0883	0.96	1.0469	0.9868	0.8932	0.9363
50	0.998	0.9779	1.4195	0.892	1.126	1.1368	1.1695	1.1149	0.9862
51	0.999	0.9196	0.8261	0.7246	1.161	1.364	1.2725	1.0948	0.9938
52	0.9681	0.9363	1.0004	1.0496	1.1209	1.0409	1.0547	1.414	1.0143
53	0.9992	0.9001	0.9957	1.0171	0.9935	1.0137	1.148	0.9381	0.9758
54	0.9938	1.0033	1.4881	0.9702	1.1333	1.1173	1.0625	1.0034	0.9072
55	0.9426	0.9437	0.9264	1.0708	1.0941	1.086	1.2304	1.2034	1.042
56	0.8295	1.0599	1.2135	1.1135	0.9736	0.8085	1.0361	1.143	0.9642
57	0.9994	0.955	0.9368	0.8709	0.9187	0.9381	0.9255	0.8542	0.8938
58	0.9942	1.0072	0.8333	1.3976	0.8991	1.2892	1.0904	1.1061	0.9399
59	0.8725	1.1017	1.0785	1.4195	0.5199	0.9608	1.147	1.0636	0.9003
60	0.9664	1.0123	1.1767	1.0266	1.0801	1.0824	1.036	1.013	1.005
61	0.9991	0.9834	1.1494	1.4597	1.057	1.0388	1.0635	1.013	1.0072
62	0.9677	0.8908	0.8523	0.8476	1.0886	0.9755	0.9651	0.9611	1.0153
63	0.9554	0.9926	1.0633	1.1107	1.0763	1.0702	1.0913	1.0993	1.0315
64	1.076	1.0153	1.0197	1.0156	1.038	1.1529	1.1386	1.1637	1.0213
65	0.8847	1.034	0.8906	1.0108	0.9765	1.0396	1.1175	1.1392	1.0542
66	0.9625	1.0728	1.1122	1.0119	1.2437	0.944	0.9954	1.0762	0.9608
67	0.9112	1.0157	1.1839	0.8803	0.8676	1.0046	0.9085	0.997	0.9288
68	0.8656	1.0114	1.0303	1.1315	1.1684	1.1624	0.9655	1.1335	1.0103
69	0.8468	0.9967	1.0991	1.0832	0.9395	0.9099	0.8675	1.1652	0.9539
70	0.6444	0.6712	0.9946	1.018	0.9456	0.635	0.9653	1.0346	0.7914
71	0.9835	0.9334	0.7893	0.8864	0.9115	0.9747	0.665	1.1262	0.9244
72	1.027	1.1967	1.3563	1.002	1.1807	1.1251	1.1294	1.0574	1.0605
73	1.0179	0.9984	0.7534	1.0227	0.969	0.8432	1.1497	1.1484	1.054
74	1.018	1.0101	1.0856	1.0248	1.0604	1.0942	1.1098	1.0096	1.075
75	1.0194	1.0203	1.0207	1.3204	1.0771	0.934	1.2826	1.026	1.047
76	0.9981	1.0119	1.0805	1.0091	1.1228	1.0061	1.0672	1.0976	1.1059
77	0.9913	1.4196	1.3779	1.8687	1.0823	0.9696	0.9935	1.0452	1.121
78	0.969	0.8508	0.9784	0.8319	0.9707	1.0071	1.0048	1.1078	0.9372
79	0.9695	1.0812	0.827	1.005	1.0364	1.0836	1.1785	1.0895	1.0067
80	0.99	1.1799	0.871	2.1464	0.9048	1.16	1.0394	1.1298	1.186
81	0.9664	0.9308	1.1975	0.9075	1.0859	1.0587	0.8485	1.0964	1.0152
82	0.9963	1.0409	1.0464	0.9732	1.042	1.01	1.0785	1.0174	1.0295
83	1.1567	0.843	1.1031	0.8412	1.2474	0.9511	1.0632	1.0387	1.0278
84	1.0282	0.9958	1.1771	1.0011	1.1362	1.0014	1.0566	1.0561	1.0387
Total	0.9459	0.9859	1.022	1.0667	1.0507	1.0487	1.0836	1.0361	1.0055

2B. The annual deflator of the gross value added (p_{it})

Sector	1990	1991	1992	1993	1994	1995	1996	1997
1	1.3286	3.3761	2.9093	3.38	2.2388	1.369	1.5139	2.1974
2	1.0832	1.193	4.7407	2.5831	2.6333	1.4709	1.5814	2.2299
3	1.0105	1.5367	2.489	3.905	1.7752	1.1326	1.6551	2.2881
4	1.1369	3.5164	2.3676	3.4533	2.8543	1.297	1.3601	1.8862
5	1.0578	2.5167	2.624	3.0245	2.9469	1.3135	1.5803	2.1353
6	1.5043	2.4351	3.854	2.9484	2.3369	0.9401	1.0163	5.0231
7	1.0106	3.4636	2.5766	3.9832	2.1752	1.3626	1.4354	2.3395
8	1.0208	1.9383	3.0282	3.7423	3.7851	1.2478	1.3963	2.297
9	1.0264	2.8222	4.2459	3.3771	4.2912	1.2413	1.3425	2.6489
10	1.0239	3.0998	4.4138	3.1683	2.6687	1.2186	1.5192	2.7389
11	1.0592	2.8364	4.0401	4.7427	4.8687	1.2605	1.5128	2.4489
12	1.1064	2.5893	4.1739	4.1101	2.3088	0.9722	1.6419	2.6583
13	1.0082	2.2761	3.547	3.5501	2.2627	1.2125	1.4988	2.4432
14	1.301	2.2943	2.8126	3.867	2.556	1.3951	1.4299	2.4023
15	1.1543	2.3432	2.4834	2.2787	3.5969	1.2065	1.8513	4.5231
16	1.1165	2.0276	2.4369	2.8388	2.0678	1.216	1.3991	1.7015
17	1.0982	1.5092	2.9353	3.7578	3.0984	1.2863	1.3523	2.1246
18	1.2284	1.784	3.1473	3.2133	3.2953	1.2331	1.4687	2.3946
19	1.089	2.3556	2.965	3.0639	2.6399	1.2096	1.3233	2.2946
20	1.2161	3.0218	2.834	3.4817	2.7333	1.2727	1.4101	2.1554
21	1.1855	6.6433	2.4932	2.505	2.6856	1.3809	1.3864	1.8862
22	1.249	1.4734	2.1455	3.4699	2.845	1.4761	2.1526	1.9543
23	1.0994	5.2573	4.938	3.4318	2.2794	0.45	1.9019	1.045
24	1.7773	2.1686	3.1873	2.9498	2.2624	1.1796	1.5043	2.757
25	1.1972	4.8504	2.9934	2.9742	2.7167	1.1946	1.5684	1.2058
26	1.1713	5.0576	3.0436	2.7189	4.81	1.2823	1.301	2.3686
27	1.0728	4.92	4.1548	3.2526	2.7999	1.3711	1.4258	2.1354
28	1.0376	2.2332	3.855	1.6998	5.0744	1.2095	1.4393	2.2231
29	1.2299	1.6516	3.8101	2.3585	2.0945	1.327	1.5587	2.3546
30	1.0911	5.7543	3.1516	2.1513	2.6262	1.4123	1.3356	1.9679
31	1.0803	4.2647	3.8718	3.0461	2.1557	1.3394	1.405	2.2499
32	1.1573	2.6128	2.8434	2.402	2.1155	1.2345	1.4145	2.3075
33	1.1316	2.2943	2.8195	3.5806	2.5307	1.2728	1.483	2.76
34	1.0761	2.3806	2.9537	4.0037	3.1455	1.2902	1.3899	2.3406
35	1.3827	3.8407	2.9062	3.4491	2.5869	1.4287	1.7201	2.2691
36	1.2255	2.8776	3.5149	3.9167	3.1572	1.2884	1.5574	2.3596
37	1.1549	4.9343	3.9484	2.716	2.4361	1.2683	1.4268	2.3691
38	1.1565	4.1001	3.4092	2.3005	2.3962	1.1982	1.6029	2.0273
39	1.1372	2.6519	3.1622	3.8236	2.1797	1.1675	1.3633	1.6544
40	1.2127	2.9874	3.5829	3.4842	2.1683	1.2151	1.6015	3.1219
41	1.0433	4.285	3.722	3.57	2.9771	1.1931	1.2484	2.5211
42	1.1148	3.7686	2.8659	2.9161	3.1391	1.3042	1.4913	2.1546
43	1.0585	1.9829	3.031	2.7001	2.9453	1.3259	1.5953	1.9361
44	1.0951	2.2769	2.9299	3.0807	2.9292	1.1521	1.7264	1.9484
45	1.1821	2.2024	3.131	3.6141	2.8436	1.1738	1.8879	1.8632
46	1.2022	1.684	3.8872	2.9811	2.3623	1.1321	1.3036	2.4103

Sector	1990	1991	1992	1993	1994	1995	1996	1997
47	1.152	2.9614	3.0701	2.7831	2.5931	1.2135	1.6059	1.9843
48	1.0092	1.9183	2.8176	3.7464	2.594	1.2164	1.6437	2.1703
49	1.06	1.7653	2.892	3.0079	3.134	1.2173	1.5786	1.9405
50	1.0914	3.9595	3.869	2.7333	3.5483	1.4986	1.7504	1.6762
51	1.2943	1.2613	1.5983	2.8265	2.2455	1.287	1.7386	3.0112
52	1.1496	2.2739	2.4237	4.4141	2.3721	1.3337	1.4628	2.0967
53	1.0087	2.0837	2.6566	3.9419	2.5006	1.2498	1.5697	1.5401
54	1.0604	3.2741	2.9473	2.8519	3.0977	1.3157	1.4088	1.9273
55	1.022	2.8444	3.2215	2.7459	2.9129	1.3597	1.5472	1.9633
56	1.1574	2.0803	3.2774	2.8048	2.952	1.3373	1.5552	2.7476
57	1.0244	3.2272	3.7159	2.9641	1.8144	1.2063	1.3984	2.1496
58	1.0503	2.5843	3.0129	3.9204	1.3498	1.1768	1.5407	2.8845
59	1.055	2.4783	2.1771	3.7616	2.2221	1.0525	1.5737	2.2302
60	1.0729	2.8724	2.6036	3.5297	2.3308	1.1482	1.3831	2.2591
61	1.1764	1.7005	2.1581	3.5597	3.3743	1.3531	1.6959	1.8615
62	0.8176	6.0525	4.6723	2.132	2.5884	1.281	1.0819	3.1609
63	1.0387	2.5885	3.1989	2.8755	2.4546	1.37	1.4743	2.3196
64	1.0662	8.1835	3.1633	2.5016	1.9354	1.5511	1.491	2.5158
65	1.035	2.92	4.5193	3.1517	2.7931	1.7392	1.5096	2.8199
66	1.009	6.4858	3.1926	3.5248	2.1208	1.0519	1.4874	2.1056
67	1.1951	4.1389	3.7431	2.8573	2.1595	1.1695	1.6569	2.6092
68	1.137	3.0707	4.0257	3.9912	1.9559	1.2083	1.6338	2.3618
69	1.4618	3.3876	3.5024	6.7444	2.1864	1.4082	1.6047	4.3083
70	1.0683	7.4294	4.0355	5.8503	2.412	1.1966	2.053	2.2971
71	1.1976	3.4105	3.6519	3.5496	3.7703	1.2615	1.5924	2.2992
72	1.1223	2.4013	2.0969	4.7673	3.0417	1.4182	1.5439	2.0025
73	1.1989	2.2291	2.6142	2.9196	2.4252	1.3058	1.433	2.5113
74	1.1474	2.205	2.3497	3.8903	2.2547	1.5224	1.6531	2.5628
75	1.1806	2.5068	3.9856	3.1315	2.3034	1.4902	1.054	1.713
76	1.0064	1.7246	2.3224	2.9378	2.2367	1.4867	1.4117	10.774
77	1.0065	1.6964	2.7696	4.5735	1.9051	1.322	1.4699	2.0777
78	1.0291	2.3688	2.6086	3.5893	2.6129	1.4991	1.4553	2.231
79	1.0013	1.6806	3.4486	2.9955	2.7008	1.3743	1.5032	2.4178
80	1.0836	3.0443	2.4597	4.6168	2.2112	1.3827	1.5146	1.9248
81	1.0406	3.0942	2.6926	2.9943	2.3689	1.5998	1.3421	2.083
82	1.1791	2.3626	2.6256	2.9733	2.5547	1.4222	1.3612	2.048
83	1.0228	2.9198	2.6235	2.7811	2.3901	1.3465	1.4748	1.999
84	1.0117	3.4419	2.3063	3.1748	2.6231	1.4404	1.5208	2.369
Total	1.1283	2.914	3.2231	3.0614	2.3754	1.3426	1.4583	2.4207

2B. The annual deflator of the gross value added (p_{it}) – continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005	Average 1990-2005
1	1.2155	1.4258	1.5382	1.3124	1.1793	1.2985	1.1619	0.9034	1.6319
2	1.6106	0.9261	1.3661	1.654	1.1934	1.0261	1.055	1.1168	1.5447
3	1.2975	1.5614	1.2319	1.5303	1.3392	1.3453	1.1073	1.2811	1.551
4	1.6785	1.6147	1.4861	1.282	1.1375	1.3122	1.1258	1.0249	1.6408
5	1.6172	1.429	1.4818	1.3742	1.2603	1.4926	1.1163	1.048	1.6444
6	1.9869	1.4338	1.5411	1.3966	1.3817	0.9956	1.1713	1.0931	1.7038
7	1.5383	1.3714	1.7162	1.3742	1.0263	0.9648	1.1255	1.2213	1.6274
8	1.3244	1.206	1.299	1.4064	1.0797	1.1805	1.0932	1.0631	1.5773
9	1.3034	1.2172	1.5657	1.4137	1.2484	1.0261	1.1467	1.0191	1.6828
10	1.2715	1.227	1.4285	1.3384	1.3029	1.1308	1.057	1.1243	1.654
11	1.2365	1.3459	1.7813	1.1971	1.1414	0.9918	1.1746	1.0801	1.7338
12	1.0753	1.2577	1.6864	1.4819	1.1578	1.237	1.1711	1.0062	1.6403
13	1.3228	1.1215	1.4641	1.3837	1.1145	1.0381	1.1212	1.1948	1.5692
14	1.1873	1.3133	1.5159	1.3983	1.1221	1.1567	1.1818	1.0929	1.6179
15	1.5011	1.7569	1.1011	1.2258	1.18	1.3071	1.0114	1.0784	1.6602
16	1.361	1.3241	1.7585	1.4351	1.2178	1.1611	1.1486	1.1701	1.5198
17	1.2232	1.2974	1.4025	1.4062	1.2512	1.1837	1.2104	1.056	1.5608
18	1.1946	1.3147	1.2565	1.3527	1.1817	1.1288	1.201	1.0699	1.576
19	1.3262	1.3157	1.3699	1.7408	1.3139	1.2698	1.1595	1.1068	1.6088
20	1.2708	1.3293	1.52	1.4296	1.2952	1.1183	1.1677	1.0212	1.6278
21	1.6373	1.4093	1.5782	1.3849	1.3111	1.0591	1.0718	0.9528	1.6627
22	1.3683	1.4535	1.2796	1.3168	1.2245	1.165	1.1104	1.0933	1.573
23	1.499	1.2419	1.6778	1.3614	1.1934	1.1131	1.3785	0.8837	1.5708
24	1.5659	1.2309	1.5657	1.2749	1.4475	0.9497	1.019	1.5096	1.6581
25	1.4344	1.3268	1.5409	1.3224	1.2986	1.2411	1.2219	1.0007	1.6276
26	1.4696	1.4523	1.3849	1.3823	1.1994	1.1002	1.1375	1.0895	1.7264
27	1.5642	1.2375	1.5829	1.4193	1.2141	1.0482	1.1614	1.041	1.7146
28	1.5385	1.2437	1.3972	1.2086	1.1648	1.076	1.1013	1.0447	1.5719
29	1.214	1.4119	1.3997	1.3173	1.2207	1.0416	1.0492	1.3056	1.5423
30	1.3568	1.2152	1.3076	1.3201	1.1035	1.0963	1.086	1.1878	1.5999
31	1.3776	1.1328	1.5773	1.3638	1.38	1.1935	1.1479	1.1568	1.6695
32	1.4568	1.2246	1.6498	1.3999	1.3294	1.1807	1.1842	1.1116	1.5794
33	1.3757	1.366	1.3257	1.4713	1.1489	1.1125	1.1625	1.1176	1.6132
34	1.419	1.3664	1.2999	1.3357	1.1684	1.1252	1.1751	1.1193	1.6235
35	1.4671	1.4609	1.6526	1.4058	1.2049	1.1923	1.1561	1.0108	1.7297
36	1.548	1.2162	1.3637	1.5765	1.2018	1.0598	1.2773	1.0899	1.7072
37	1.5366	1.3978	1.5139	1.3995	1.2609	1.0817	1.2136	1.1219	1.711
38	1.5179	1.2317	1.4691	1.5398	1.3072	1.153	1.2115	1.1384	1.6511
39	1.3955	1.3915	1.5701	1.3784	1.1408	1.1702	1.1249	1.0739	1.5739
40	1.4088	1.2182	1.4079	1.4205	1.1109	1.1599	1.1408	1.1716	1.666
41	1.2227	1.3271	1.6049	1.3763	1.0569	1.2238	1.5642	0.9233	1.6904
42	1.2425	1.3844	1.5732	1.4167	1.1666	1.057	1.2121	1.112	1.6474
43	1.2465	1.2728	1.5636	1.5851	1.1352	1.0525	1.1449	1.0166	1.552
44	1.3257	1.2815	1.4661	1.413	1.276	1.4936	1.1907	1.1557	1.6247

Sector	1998	1999	2000	2001	2002	2003	2004	2005	Average 1990-2005
45	1.4047	1.1808	1.553	1.556	1.1989	1.0473	1.3359	1.1835	1.6405
46	1.4113	1.3515	1.7085	1.5502	1.2455	1.1439	0.9082	1.188	1.5815
47	1.8841	1.2442	1.4878	1.468	1.2456	1.0306	1.2432	1.2577	1.6495
48	2.4391	1.3671	1.4779	1.6118	1.3189	1.1459	1.1899	1.153	1.6736
49	1.3322	1.4834	1.3242	1.6224	1.1115	1.1757	1.153	1.1557	1.5731
50	1.3302	1.3266	1.3632	1.3531	1.34	1.2043	1.1455	1.0807	1.6949
51	1.2735	1.2153	1.6586	1.196	1.3174	1.2211	1.1781	1.2996	1.5237
52	1.3075	1.4453	1.5314	1.5771	1.3093	1.0922	1.1714	1.0875	1.6203
53	1.5179	1.3129	1.3401	1.2437	1.1879	1.1787	1.1712	1.0533	1.5354
54	1.3781	1.2509	1.4601	1.4261	1.2872	1.1173	1.1525	0.9944	1.6035
55	1.2818	1.2983	1.6895	1.7125	1.4238	1.2574	1.2546	1.1207	1.6725
56	1.208	1.4296	1.5465	1.4456	1.3419	1.1939	1.1945	1.2179	1.6611
57	1.6248	1.6419	1.3853	1.5052	1.394	1.7451	1.1621	1.0914	1.6822
58	1.5971	1.5931	1.3221	1.6331	1.3299	1.2198	1.2533	1.1869	1.6494
59	1.3414	1.3218	1.2409	1.424	1.1356	1.1191	1.3147	1.1166	1.5425
60	1.4955	1.2843	1.7407	1.3778	1.2062	1.1881	1.1281	1.0625	1.6016
61	1.4699	1.2955	1.2187	1.3505	1.2288	1.2145	1.1099	1.1278	1.5651
62	1.5076	2.2512	1.5136	1.4479	1.4631	1.1614	1.1177	1.1279	1.7654
63	1.4819	1.4724	1.3497	1.4285	1.3101	1.2208	1.169	1.1468	1.6333
64	1.6635	1.4709	1.326	1.2748	1.1775	1.1185	1.1679	1.0817	1.7101
65	1.5664	1.5018	1.2402	1.3313	1.2143	1.0949	1.1293	1.1803	1.7246
66	1.6935	1.4562	2.0038	1.1779	1.2696	1.1712	1.0193	1.3635	1.7258
67	1.6497	1.4953	1.5034	1.5963	1.2378	1.197	1.1026	0.8183	1.6934
68	1.5573	1.4647	1.3115	1.3458	1.3098	1.2719	1.1074	1.119	1.6857
69	1.0964	1.3064	1.6403	1.5196	1.01	1.0294	1.0373	1.181	1.7921
70	1.4696	1.877	1.719	0.9332	1.2607	1.0346	1.1939	0.9455	1.8356
71	2.1302	1.9622	1.4038	1.3825	1.2184	1.3613	1.1379	1.0575	1.8234
72	1.7965	1.4731	1.462	1.2713	1.1562	1.1898	1.1768	1.1231	1.6565
73	2.066	1.56	1.3387	1.2319	1.3718	1.0147	1.1176	1.192	1.6218
74	2.1162	1.7691	1.4411	1.4173	1.0615	1.1704	1.156	1.0285	1.6739
75	1.49	1.426	1.275	1.4093	1.4222	1.1103	1.19	1.018	1.5902
76	1.5775	1.509	1.4239	1.3485	1.2727	1.1108	1.1498	1.1871	1.7087
77	1.6339	1.6476	1.8343	1.5142	1.2224	1.0836	1.1071	1.1269	1.6109
78	1.6651	1.4089	1.2963	1.3409	1.2884	1.3438	1.1511	0.9954	1.6243
79	1.733	1.6419	1.1671	1.2279	1.2892	1.2235	1.1385	1.0238	1.5952
80	2.0776	1.584	1.334	1.5686	1.1762	1.1	1.1346	1.278	1.6872
81	2.023	1.485	1.5809	1.3531	1.2582	2.0856	1.1596	1.1776	1.7282
82	1.943	1.574	1.3601	1.3733	1.2997	1.4159	1.2533	1.1763	1.6627
83	1.845	1.6171	1.3242	1.3635	1.3206	1.626	1.2456	1.2405	1.671
84	1.8345	1.809	1.3767	1.2171	1.1921	1.2447	1.1765	1.1879	1.6794
Total	1.5376	1.4577	1.4397	1.3814	1.2314	1.2189	1.1431	1.114	1.6532

2C. Sectoral weights (w_{it})

Sector	1989	1990	1991	1992	1993	1994	1995	1996	1997
1	0.0468	0.1163	0.152	0.1251	0.1591	0.1514	0.1466	0.1476	0.1496
2	0.0845	0.0813	0.0272	0.0454	0.0392	0.0394	0.0478	0.0412	0.035
3	0.0187	0.0272	0.0121	0.0103	0.014	0.0105	0.0083	0.0078	0.0058
4	0.0026	0.0024	0.0023	0.0016	0.0017	0.002	0.0019	0.0017	0.0011
5	0.0048	0.0045	0.0032	0.003	0.0025	0.0031	0.0029	0.003	0.0029
6	0.0315	0.0163	0.0171	0.0177	0.0169	0.0159	0.0106	0.0038	0.0066
7	0.0168	0.0181	0.0199	0.0166	0.0194	0.0179	0.0199	0.021	0.0202
8	0.0027	0.0027	0.0017	0.0035	0.0044	0.0069	0.0075	0.0081	0.0093
9	0.0007	0.0013	0.0015	0.0024	0.0026	0.0036	0.0037	0.0042	0.0041
10	0.0041	0.0035	0.0041	0.0051	0.0056	0.0067	0.0061	0.0068	0.009
11	0.0004	0.0007	0.0006	0.001	0.0018	0.0027	0.0028	0.0041	0.0039
12	0.0036	0.0045	0.0046	0.0049	0.0059	0.0051	0.002	0.0023	0.0024
13	0.0184	0.0149	0.0114	0.0125	0.0128	0.0117	0.0101	0.0142	0.0136
14	0.0164	0.0178	0.0156	0.0151	0.0177	0.0194	0.0247	0.0291	0.0306
15	0.0065	0.0114	0.0046	0.0033	0.0024	0.0027	0.0021	0.0024	0.0049
16	0.0444	0.0403	0.0299	0.0183	0.0165	0.0138	0.0122	0.0134	0.0093
17	0.0242	0.0192	0.0109	0.0109	0.0104	0.0175	0.0171	0.0176	0.0173
18	0.0013	0.0018	0.0011	0.0011	0.0009	0.0012	0.0011	0.0011	0.0012
19	0.0134	0.0101	0.0079	0.007	0.0061	0.0056	0.0049	0.0052	0.0047
20	0.0118	0.0086	0.0087	0.0088	0.0087	0.0102	0.0091	0.0124	0.0101
21	0.0041	0.0047	0.0057	0.0041	0.003	0.0032	0.0036	0.004	0.0027
22	0.0039	0.004	0.002	0.0019	0.002	0.0029	0.0031	0.0056	0.0046
23	0.0009	0.001	0.0014	0.0023	0.0045	0.0038	0.0012	0.0019	0.0009
24	0.0163	0.0156	0.0297	0.0312	0.0324	0.0324	0.0279	0.0278	0.0314
25	0.0032	0.0004	0.0015	0.0019	0.0021	0.0021	0.0019	0.0016	0.0004
26	0.002	0.0021	0.0039	0.0036	0.0023	0.0031	0.0027	0.0015	0.0013
27	0.003	0.0017	0.0034	0.0052	0.0053	0.0056	0.0051	0.0046	0.0033
28	0.0025	0.0027	0.0021	0.0027	0.0015	0.0027	0.002	0.0016	0.0015
29	0.0046	0.006	0.0032	0.0032	0.0024	0.002	0.0019	0.0017	0.0013
30	0.0014	0.0013	0.0027	0.0028	0.0016	0.0015	0.0016	0.0015	0.0011
31	0.0003	0.0036	0.0043	0.005	0.0052	0.0038	0.0039	0.004	0.003
32	0.0117	0.0111	0.0084	0.0056	0.0041	0.0031	0.0027	0.0026	0.0024
33	0.0043	0.0034	0.0029	0.0029	0.0026	0.0025	0.0029	0.0032	0.0037
34	0.0018	0.0011	0.0009	0.0008	0.0011	0.0013	0.0014	0.0022	0.0019
35	0.0004	0.0003	0.0004	0.0003	0.0003	0.0004	0.0005	0.0005	0.0005
36	0.0004	0.0003	0.0003	0.0006	0.0011	0.0017	0.0019	0.0019	0.0015
37	0.0024	0.0024	0.0032	0.0041	0.0037	0.0035	0.0035	0.0034	0.0034
38	0.0114	0.0106	0.0124	0.0114	0.0064	0.0047	0.0028	0.0026	0.002
39	0.0008	0.0012	0.0009	0.0009	0.0011	0.0009	0.0004	0.0002	1E-04
40	0.0017	0.0011	0.0009	0.001	0.0018	0.0014	0.0012	0.0013	0.0015
41	0.0037	0.0038	0.004	0.0045	0.0049	0.0069	0.0058	0.0065	0.0068
42	0.0135	0.0076	0.0157	0.0096	0.0084	0.0108	0.0104	0.0103	0.0095
43	0.0085	0.0075	0.005	0.0039	0.0024	0.0029	0.003	0.0028	0.0023
44	0.0327	0.0242	0.0171	0.0139	0.0121	0.0145	0.0117	0.014	0.0117
45	0.0067	0.0065	0.0045	0.0039	0.0033	0.0036	0.0034	0.0044	0.0033
46	0.0163	0.0152	0.0079	0.006	0.0052	0.005	0.0037	0.0017	0.0016

Sector	1989	1990	1991	1992	1993	1994	1995	1996	1997
47	0.0047	0.0086	0.0053	0.0045	0.0041	0.0043	0.0036	0.0035	0.0019
48	0.0077	0.0061	0.0029	0.002	0.0019	0.0018	0.0013	0.0009	0.0009
49	0.0264	0.0253	0.0127	0.012	0.0082	0.0103	0.0092	0.0088	0.0068
50	0.0023	0.0024	0.003	0.0031	0.0013	0.0019	0.0024	0.0031	0.002
51	0.005	0.0035	0.0011	0.0004	0.0006	0.0005	0.0006	0.001	0.0013
52	0.0122	0.0114	0.007	0.0043	0.0044	0.0067	0.008	0.0083	0.0078
53	0.013	0.0086	0.0061	0.0032	0.0051	0.0068	0.006	0.0065	0.0046
54	0.0168	0.0135	0.0069	0.0046	0.0038	0.0043	0.0039	0.0023	0.0018
55	0.0087	0.0071	0.0107	0.0095	0.0082	0.0094	0.0096	0.0121	0.0104
56	0.005	0.0045	0.0025	0.0035	0.0018	0.002	0.0024	0.0025	0.0029
57	0.0075	0.0035	0.0036	0.0033	0.0033	0.0018	0.0012	0.0019	0.0018
58	0.0035	0.002	0.0019	0.0009	0.0012	0.0006	0.0004	0.0004	0.0006
59	0.002	0.0026	0.002	0.001	0.0006	0.0008	0.0004	0.0004	0.0002
60	0.0159	0.009	0.0089	0.0078	0.0096	0.0106	0.0093	0.0091	0.0088
61	0.005	0.006	0.0038	0.002	0.0015	0.0028	0.0026	0.0022	0.002
62	0.0141	0.0059	0.0325	0.0489	0.0405	0.0436	0.0398	0.0254	0.0289
63	0.0599	0.057	0.0455	0.0468	0.0535	0.0678	0.0691	0.0679	0.0565
64	0.0512	0.0516	0.1204	0.1176	0.0873	0.0706	0.0908	0.0958	0.0974
65	0.0032	0.0034	0.0028	0.0044	0.0041	0.0043	0.0112	0.0177	0.0197
66	0.0072	0.0092	0.0155	0.0162	0.0132	0.0083	0.0061	0.0064	0.0042
67	0.0184	0.0172	0.021	0.024	0.0184	0.0152	0.0121	0.013	0.0134
68	0.0349	0.0281	0.0294	0.0403	0.0588	0.0445	0.0374	0.0443	0.0433
69	0.0024	0.0027	0.0031	0.0029	0.0061	0.0059	0.0064	0.006	0.0099
70	0.006	0.0028	0.0041	0.0035	0.0042	0.0059	0.0054	0.0067	0.0043
71	0.0015	0.0013	0.0015	0.003	0.0031	0.006	0.0053	0.0035	0.0029
72	1E-10	0.0016	0.0017	0.0006	0.0014	0.0018	0.002	0.0023	0.0017
73	0.0017	0.0015	0.0023	0.0022	0.0022	0.0029	0.0026	0.0032	0.0034
74	0.0087	0.0074	0.0081	0.007	0.011	0.0105	0.012	0.0174	0.0196
75	0.0229	0.0287	0.0274	0.052	0.0522	0.0496	0.0522	0.0312	0.0184
76	0.0114	0.0109	0.0075	0.0145	0.0143	0.0148	0.0163	0.0152	0.073
77	0.0022	0.0021	0.0016	0.0015	0.0021	0.0016	0.0015	0.0023	0.0018
78	0.0097	0.0072	0.0066	0.005	0.0042	0.0045	0.0053	0.005	0.0043
79	0.0108	0.011	0.007	0.0089	0.0067	0.0065	0.0066	0.0072	0.007
80	0.001	0.0012	0.0032	0.0019	0.0061	0.0055	0.0066	0.0087	0.0062
81	0.0276	0.0296	0.0322	0.0328	0.0319	0.0336	0.0391	0.0322	0.0289
82	0.0245	0.0276	0.029	0.0258	0.0253	0.0263	0.027	0.0267	0.022
83	0.0187	0.0216	0.0236	0.0205	0.0186	0.0197	0.019	0.0202	0.0158
84	0.014	0.0145	0.0147	0.0102	0.0099	0.0122	0.014	0.0179	0.0181
Total	1	1	1	1	1	1	1	1	1

2C. Sectoral weights (w_{it}) - continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005
1	0.1053	0.1142	0.0924	0.1117	0.0914	0.1003	0.1174	0.0741
2	0.044	0.0253	0.0231	0.0272	0.0261	0.02	0.017	0.0146
3	0.0041	0.0046	0.0027	0.0033	0.0035	0.004	0.0033	0.0035
4	0.0013	0.0018	0.0019	0.0016	0.0014	0.0014	0.0015	0.001
5	0.0033	0.003	0.0035	0.0034	0.0036	0.0045	0.0037	0.0035
6	0.0079	0.011	0.0126	0.0134	0.014	0.0111	0.011	0.0099
7	0.0212	0.0236	0.0297	0.0324	0.0258	0.0206	0.0213	0.0218
8	0.0077	0.0048	0.0046	0.0044	0.0037	0.0043	0.0052	0.0048
9	0.0032	0.0025	0.0027	0.0024	0.0026	0.0017	0.0018	0.0016
10	0.0071	0.0052	0.005	0.0062	0.0069	0.0065	0.006	0.0062
11	0.003	0.003	0.0061	0.0049	0.0056	0.0069	0.0069	0.0058
12	0.0018	0.001	0.0014	0.0005	0.0005	0.0006	0.0005	0.0004
13	0.0107	0.0082	0.011	0.0113	0.0104	0.0089	0.0086	0.0097
14	0.0232	0.0138	0.0149	0.0194	0.0165	0.0196	0.0178	0.0183
15	0.0045	0.0022	0.0018	0.0016	0.0013	0.0013	0.0009	0.0006
16	0.0081	0.0073	0.0091	0.0086	0.0087	0.0083	0.008	0.0076
17	0.0133	0.013	0.0148	0.0155	0.0156	0.0146	0.0145	0.0126
18	0.001	0.0008	0.0006	0.0008	0.0008	0.0007	0.0007	0.0006
19	0.0043	0.0041	0.0048	0.0057	0.006	0.0061	0.0057	0.0052
20	0.0082	0.0092	0.0102	0.0102	0.0107	0.0099	0.0114	0.0104
21	0.003	0.0033	0.0041	0.0042	0.0052	0.0043	0.0037	0.0032
22	0.0042	0.0054	0.005	0.0053	0.0055	0.0052	0.0052	0.0054
23	0.0008	0.0004	0.0004	0.0004	0.0003	0.0003	0.0004	5E-05
24	0.0333	0.025	0.028	0.0213	0.0259	0.0194	0.0165	0.0237
25	0.0004	0.0003	0.0003	0.0002	0.0002	0.0002	0.0002	0.0001
26	0.0013	0.0016	0.0016	0.0017	0.0016	0.0013	0.0012	0.0013
27	0.0036	0.0033	0.0036	0.0035	0.0035	0.003	0.0029	0.0028
28	0.0016	0.0012	0.001	0.0008	0.0009	0.0008	0.0008	0.0008
29	0.0011	0.0009	0.0008	0.0008	0.0007	0.0006	0.0005	0.0005
30	0.0008	0.0007	0.0005	0.0005	0.0005	0.0004	0.0003	0.0003
31	0.0028	0.002	0.0019	0.0019	0.0023	0.0026	0.0026	0.0025
32	0.0024	0.0023	0.0035	0.004	0.0046	0.0048	0.0052	0.0055
33	0.0033	0.0028	0.0026	0.0026	0.0026	0.0021	0.0022	0.002
34	0.0018	0.0017	0.0015	0.0014	0.0013	0.0011	0.0011	0.001
35	0.0005	0.0006	0.0009	0.0009	0.0007	0.0007	0.0007	0.0005
36	0.0016	0.0013	0.0012	0.0016	0.0012	0.001	0.0011	0.0011
37	0.0036	0.0035	0.0036	0.0033	0.0035	0.0026	0.003	0.0029
38	0.0021	0.0018	0.0018	0.0019	0.0022	0.0021	0.0024	0.0025
39	1E-04	0.0001	0.0002	0.0002	0.0002	0.0002	0.0002	0.0003
40	0.0014	0.0009	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007
41	0.0056	0.0036	0.0045	0.0041	0.0038	0.0029	0.0047	0.0036
42	0.0077	0.005	0.0071	0.0076	0.0063	0.0045	0.0044	0.0042
43	0.0015	0.0009	0.0011	0.0012	0.0012	0.0008	0.0007	0.0008
44	0.0104	0.0096	0.0099	0.0105	0.0109	0.0109	0.0117	0.0127
45	0.0031	0.0024	0.0037	0.004	0.0034	0.0027	0.0028	0.0027
46	0.0008	0.0008	0.0013	0.0012	0.0012	0.0011	0.0011	0.0013

Sector	1998	1999	2000	2001	2002	2003	2004	2005
47	0.0024	0.0016	0.0014	0.0013	0.0016	0.0008	0.0008	0.0007
48	0.0014	0.0009	0.001	0.001	0.0012	0.0011	0.0012	0.0014
49	0.0058	0.0058	0.0048	0.0058	0.0048	0.0046	0.0042	0.0038
50	0.0018	0.0016	0.0021	0.0017	0.002	0.0022	0.0023	0.0024
51	0.0011	0.0009	0.0008	0.0005	0.0006	0.0007	0.0009	0.0011
52	0.0068	0.0064	0.0067	0.0075	0.0085	0.0076	0.0076	0.0101
53	0.0048	0.004	0.0036	0.0031	0.0028	0.0026	0.0029	0.0024
54	0.0017	0.0015	0.0022	0.0021	0.0024	0.0023	0.0023	0.002
55	0.0087	0.0074	0.0078	0.0098	0.0118	0.0126	0.0156	0.0183
56	0.002	0.0021	0.0027	0.003	0.003	0.0023	0.0023	0.0027
57	0.002	0.0021	0.0019	0.0017	0.0017	0.0021	0.0018	0.0015
58	0.0006	0.0007	0.0005	0.0008	0.0007	0.0009	0.001	0.0011
59	0.0002	0.0002	0.0002	0.0002	0.0001	9E-05	0.0001	0.0001
60	0.0088	0.0079	0.011	0.0106	0.0106	0.0107	0.0101	0.0094
61	0.002	0.0018	0.0017	0.0023	0.0023	0.0023	0.0022	0.0021
62	0.029	0.0409	0.0362	0.0302	0.0371	0.0321	0.0279	0.0263
63	0.0551	0.056	0.0546	0.0588	0.064	0.0655	0.0674	0.0736
64	0.1199	0.1246	0.1144	0.1005	0.0949	0.0958	0.1028	0.1121
65	0.0188	0.0203	0.0152	0.0139	0.0127	0.0113	0.0115	0.0134
66	0.0047	0.0051	0.0077	0.0062	0.0076	0.0066	0.0054	0.0068
67	0.0138	0.0146	0.0176	0.0168	0.014	0.0131	0.0106	0.0075
68	0.0402	0.0414	0.038	0.0393	0.0464	0.0537	0.0464	0.0509
69	0.0063	0.0057	0.007	0.0079	0.0058	0.0042	0.0031	0.0037
70	0.0028	0.0025	0.0029	0.0018	0.0017	0.0009	0.0008	0.0007
71	0.0042	0.0053	0.004	0.0033	0.0028	0.003	0.0018	0.0019
72	0.0021	0.0026	0.0035	0.0031	0.0032	0.0034	0.0036	0.0037
73	0.005	0.0054	0.0037	0.0031	0.0032	0.0022	0.0022	0.0027
74	0.0291	0.0362	0.0384	0.0379	0.0329	0.033	0.0342	0.0307
75	0.0192	0.0194	0.0172	0.0217	0.0257	0.0208	0.0257	0.0232
76	0.0791	0.084	0.0878	0.0811	0.0895	0.0783	0.0776	0.0875
77	0.0021	0.0033	0.0057	0.011	0.0112	0.0092	0.0082	0.0084
78	0.0048	0.004	0.0034	0.0026	0.0025	0.0026	0.0025	0.0024
79	0.0081	0.01	0.0066	0.0055	0.0057	0.0059	0.0064	0.0062
80	0.0088	0.0114	0.009	0.0206	0.0169	0.0169	0.0161	0.0201
81	0.0389	0.0374	0.0481	0.0401	0.0423	0.0731	0.058	0.0649
82	0.0293	0.0334	0.0323	0.0293	0.0307	0.0343	0.0375	0.0388
83	0.0233	0.0221	0.0219	0.017	0.0217	0.0263	0.0281	0.0313
84	0.0236	0.0295	0.0325	0.0269	0.0281	0.0274	0.0275	0.0299
Total	1	1	1	1	1	1	1	1

Appendix 3 - Relative and weighted relative changes

3A. The relative output index (rq_{it})

Sector	1990	1991	1992	1993	1994	1995	1996	1997
1	2.115875	1.147633	0.91066	1.142508	1.006478	0.950222	0.967941	1.119071
2	1.004578	0.832249	1.133779	1.01411	0.90432	1.106314	0.794496	0.923842
3	1.627794	0.855624	1.101272	1.061125	0.998699	0.940887	0.828349	0.791133
4	0.891958	0.819183	0.926382	0.926424	0.992592	0.978236	0.966081	0.86775
5	0.997833	0.840898	1.111728	0.863432	0.978253	0.957494	0.958833	1.101686
6	0.288304	1.038121	0.866227	0.984695	0.942442	0.936349	0.738198	0.621295
7	1.205535	0.938541	1.045057	0.887658	1.007963	1.093399	1.072041	0.998518
8	1.088479	0.957774	2.248042	1.01963	0.97038	1.167853	1.138875	1.201008
9	1.948386	1.222732	1.198498	0.979495	0.753459	1.11451	1.248711	0.888206
10	0.953177	1.104271	0.913214	1.039499	1.071942	0.999467	1.072368	1.174318
11	1.676501	0.966695	1.29857	1.17531	0.726073	1.097298	1.405026	0.929704
12	1.266523	1.187731	0.820028	0.879079	0.889499	0.555662	1.016362	0.941692
13	0.911979	0.991923	1.001256	0.870661	0.959649	0.955163	1.366272	0.948566
14	0.947204	1.129781	1.11076	0.918309	1.016504	1.225215	1.199	1.063843
15	1.726654	0.509303	0.937501	0.967927	0.747515	0.838469	0.915919	1.088831
16	0.918535	1.086536	0.808419	0.963475	0.961287	0.974722	1.140142	0.99438
17	0.817745	1.121219	1.091138	0.768846	1.287603	1.023656	1.107267	1.11986
18	1.244865	1.031555	1.019117	0.799703	0.93558	0.973489	0.982396	1.136591
19	0.786818	0.983677	0.962655	0.862187	0.824728	0.961469	1.183027	0.952495
20	0.676437	0.995973	1.147139	0.857021	1.018254	0.940651	1.405451	0.920918
21	1.084841	0.547767	0.932776	0.891484	0.918171	1.089084	1.189157	0.872042
22	0.92584	0.999952	1.424233	0.914868	1.220105	0.966169	1.240085	1.019871
23	1.147771	0.785495	1.103047	1.692457	0.867911	0.924318	1.22619	1.06976
24	0.656476	1.141449	1.060579	1.14423	1.075569	0.974347	0.963303	0.988571
25	0.12447	2.166584	1.39359	1.075609	0.884753	1.031198	0.781203	0.494126
26	0.988745	1.104166	0.978803	0.717871	0.654905	0.895333	0.644036	0.858508
27	0.59724	1.18903	1.192728	0.956031	0.896156	0.88617	0.916453	0.826557
28	1.208219	1.029465	1.06925	0.978253	0.852005	0.83145	0.816777	1.008532
29	1.197513	0.962459	0.845571	0.972881	0.915852	0.966299	0.82942	0.824839
30	0.971157	1.029578	1.053395	0.815926	0.875489	1.013187	1.024077	0.85377
31	14.2841	0.837884	0.972022	1.029138	0.810352	1.004652	1.069676	0.813961
32	0.926583	0.862198	0.751506	0.923496	0.841741	0.950818	0.993029	0.991644
33	0.782849	1.105023	1.166928	0.757313	0.903284	1.222007	1.069887	1.015841
34	0.634224	0.954615	1.047513	0.990927	0.947462	1.107086	1.579317	0.896041
35	0.520079	1.030308	0.969045	0.961377	1.000942	1.19856	0.9677	0.949739
36	0.632028	1.06867	1.879679	1.403864	1.14533	1.169488	0.910059	0.843953
37	0.96629	0.812669	1.060005	0.990985	0.937129	1.059447	0.987562	1.017321
38	0.914687	0.844657	0.87149	0.739977	0.726066	0.674726	0.836643	0.916541
39	1.525511	0.887352	1.043665	0.912726	0.929045	0.551778	0.458081	0.751551
40	0.626325	0.75816	1.025529	1.578297	0.865076	0.9575	0.992296	0.872971
41	1.120454	0.721115	0.973246	0.941692	1.112873	0.943565	1.30925	1.000561
42	0.584927	1.356245	0.665535	0.926341	0.992761	0.969393	0.964781	1.039155
43	0.938041	1.008872	0.825624	0.676518	0.998855	1.029613	0.861142	1.011954
44	0.764001	0.919733	0.894644	0.858538	0.965443	0.940848	1.011448	1.037498
45	0.922073	0.939494	0.894578	0.715744	0.900847	1.064162	1.003868	0.971563
46	0.877479	0.918219	0.623004	0.886971	0.964531	0.875618	0.502796	0.991787
47	1.794129	0.617097	0.896471	0.974315	0.965346	0.941268	0.860523	0.67849

Sector	1990	1991	1992	1993	1994	1995	1996	1997
48	0.887119	0.744176	0.800799	0.747451	0.852688	0.791945	0.663502	1.006823
49	1.025306	0.840608	1.05265	0.688918	0.952489	0.983714	0.880895	0.972187
50	1.086406	0.957402	0.844134	0.481922	0.942021	1.124957	1.099749	0.906844
51	0.603247	0.743709	0.649927	1.760061	0.994929	1.123745	1.456964	1.027913
52	0.922999	0.802074	0.811169	0.70126	1.532154	1.196818	1.040201	1.085987
53	0.745174	0.997758	0.64858	1.203563	1.277447	0.950639	0.99929	1.118959
54	0.861224	0.460846	0.734062	0.876894	0.856007	0.942579	0.594942	1.017681
55	0.903549	1.573948	0.890061	0.96005	0.928792	1.002137	1.192714	1.061962
56	0.868677	0.784955	1.395635	0.557263	0.900973	1.181951	0.991252	1.037085
57	0.515067	0.935862	0.796754	1.041841	0.69675	0.771861	1.641311	1.019273
58	0.624781	1.068155	0.495649	1.091842	0.868291	0.752639	1.014244	1.09361
59	1.38781	0.919254	0.745302	0.495126	1.364386	0.631801	0.847936	0.694863
60	0.593496	1.02603	1.078332	1.063016	1.122948	1.025046	1.034117	1.034582
61	1.141292	1.115191	0.766802	0.646228	1.306512	0.94016	0.710675	1.202937
62	0.712387	3.175976	1.059609	1.357977	1.039024	0.95789	0.845317	0.874002
63	1.035705	0.913839	1.036681	1.207196	1.221675	0.999816	0.970146	0.870206
64	1.069173	0.844599	0.994797	0.900211	0.98995	1.113335	1.031056	0.979414
65	1.164821	0.818659	1.118554	0.901803	0.897712	1.994646	1.531459	0.95453
66	1.436833	0.769975	1.051634	0.705074	0.699921	0.939215	1.024951	0.752361
67	0.885797	0.876522	0.981355	0.813598	0.904154	0.914189	0.948384	0.953933
68	0.802979	1.009029	1.096738	1.109635	0.914895	0.933947	1.057325	1.003446
69	0.889606	1.015644	0.863825	0.934913	1.047423	1.023861	0.861404	0.925266
70	0.493696	0.583249	0.687431	0.6112	1.392805	1.025555	0.882784	0.68128
71	0.841051	0.997176	1.722303	0.879609	1.217313	0.938052	0.614093	0.860625
72	1.024914	1.289909	0.54801	1.45568	1.019939	1.089592	1.067899	0.888813
73	0.818842	2.066262	1.161344	1.029322	1.289085	0.953512	1.235718	1.028995
74	0.834656	1.467005	1.197166	1.216996	1.008036	1.006532	1.274985	1.066933
75	1.202414	1.130073	1.53418	0.973401	0.975204	0.949254	0.825258	0.834347
76	1.077155	1.190341	2.677429	1.017235	1.092966	0.996717	0.959555	1.08331
77	1.04681	1.362287	1.08602	0.902577	0.939265	0.951278	1.5886	0.914465
78	0.809612	1.1614	0.935737	0.699632	0.97782	1.051412	0.95074	0.928779
79	1.151578	1.112301	1.191719	0.762762	0.848227	0.995754	1.066564	0.972938
80	1.15526	2.678176	0.803746	2.04985	0.975502	1.156161	1.276717	0.892949
81	1.168092	1.042591	1.21732	0.986502	1.0519	0.978153	0.893707	1.043452
82	1.080526	1.320322	1.090214	1.001543	0.962496	0.968927	1.058816	0.977088
83	1.275038	1.110587	1.067859	0.989441	1.046376	0.961889	1.053246	0.950134
84	1.163875	0.871391	0.966921	0.931612	1.108176	1.072186	1.22477	1.037682

3A. The relative output index (rq_{it}) - continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005
1	0.889856	1.108824	0.757775	1.272574	0.854693	1.029524	1.151394	0.779
2	1.200412	0.904275	0.962379	0.984647	0.989372	0.911213	0.9188	0.856031
3	0.832468	1.036521	0.690301	1.113024	0.974593	1.02402	0.853277	0.927751
4	1.054508	1.236559	1.031672	0.882589	0.985334	0.899777	1.102716	0.755791
5	1.056293	0.944495	1.138056	0.959909	1.037768	1.034547	0.830119	1.027943
6	1.058944	1.433216	1.068764	1.061608	0.912708	0.942744	0.967024	0.911799
7	1.044719	1.185501	1.055415	1.095391	0.955911	1.010894	1.050387	0.931926
8	0.964767	0.757004	1.052713	0.94487	0.96338	1.197441	1.260017	0.963215
9	0.912512	0.932409	1.017062	0.868634	1.051482	0.804606	1.037504	0.945972
10	0.95525	0.869321	0.971214	1.269602	1.055655	1.008394	1.001678	1.01965
11	0.955376	1.094986	1.631111	0.933124	1.23947	1.503922	0.976811	0.855736
12	1.034763	0.673665	1.159603	0.330071	1.059156	1.136601	0.869597	0.953494
13	0.911073	1.00092	1.316947	1.027249	1.018884	1.002333	0.9877	1.047678
14	0.978427	0.660594	1.027981	1.284948	0.931882	1.255654	0.877792	1.046173
15	0.954083	0.399163	1.089008	0.961286	0.875523	0.949313	0.788445	0.723294
16	0.980775	0.995184	1.01266	0.915783	1.019223	0.996677	0.961799	0.906916
17	0.967437	1.095115	1.170813	1.028427	0.991302	0.967503	0.934024	0.917798
18	1.030404	0.848033	0.978157	1.325097	1.01614	0.980622	0.912328	0.957208
19	1.047312	1.056787	1.236511	0.941578	0.988713	0.981017	0.920867	0.917731
20	0.977267	1.231508	1.055229	0.958838	1.006082	1.005625	1.122037	1.001576
21	1.029751	1.146948	1.127816	1.018533	1.156993	0.948291	0.92765	0.999862
22	1.011112	1.297689	1.037076	1.120146	1.037195	0.985134	1.03884	1.049123
23	0.977759	0.511442	1.058111	0.866273	0.96126	1.004602	1.017571	0.175976
24	1.039735	0.887312	1.014402	0.826078	1.031297	0.963163	0.943723	1.029348
25	0.983626	0.807503	1.017376	0.7288	0.753313	1.057485	1.074239	0.806334
26	1.056479	1.224931	1.060367	1.026315	0.958554	0.91233	0.921464	1.122242
27	1.053335	1.070501	0.998121	0.952929	1.028683	0.978302	0.952706	1.031668
28	1.018029	0.935394	0.868284	0.904006	1.158567	1.043313	1.039554	0.97899
29	1.010382	0.86353	0.870131	1.080618	0.949873	0.897354	0.945848	0.811135
30	0.887629	0.948258	0.911422	0.953171	1.041755	0.873712	0.923565	1.009019
31	1.054713	0.914345	0.844584	1.054001	1.054784	1.177297	0.967433	0.924908
32	1.05517	1.12732	1.338931	1.12476	1.054009	1.069081	1.048887	1.057475
33	0.982303	0.908062	1.007171	0.953324	1.059152	0.882991	1.02331	0.921906
34	1.055758	1.004358	0.967031	0.94085	0.973749	0.97389	0.964314	0.878803
35	1.05231	1.248855	1.322096	0.937996	0.770762	1.035248	1.048298	0.842388
36	1.056438	0.926692	1.00461	1.137035	0.809191	0.89262	1.012513	0.995417
37	1.055137	1.013126	0.98555	0.908638	1.028463	0.850915	1.065112	0.957451
38	1.061198	1.029355	0.972633	0.948744	1.066471	1.012641	1.095766	1.001177
39	1.076708	1.13529	1.508751	0.99629	1.034955	1.011987	1.124198	1.530693
40	1.026446	0.767856	0.911819	1.010815	0.947208	1.008966	1.047162	0.910042
41	1.035731	0.712254	1.110202	0.909315	1.087462	0.76311	1.186463	0.927043
42	1.004288	0.705975	1.299657	1.033296	0.885151	0.816127	0.931083	0.962126
43	0.797632	0.738475	1.072668	0.916697	1.147929	0.744061	0.924146	1.150585
44	1.03792	1.048239	1.008739	1.041665	0.999213	0.819114	1.024398	1.045449
45	1.019091	0.955166	1.467243	0.953922	0.86808	0.922127	0.893042	0.898362
46	0.541669	1.02075	1.45367	0.831509	0.929464	1.007379	1.248937	1.115727
47	1.021901	0.769588	0.856293	0.881598	1.173863	0.588377	0.972663	0.804806
48	1.052207	0.699546	1.010522	0.920327	1.068905	0.997603	1.014586	1.167325

Sector	1998	1999	2000	2001	2002	2003	2004	2005
49	0.977728	0.990554	0.900009	1.020196	0.913612	0.99837	0.910688	0.862151
50	1.055043	0.9918	1.388862	0.836256	1.071673	1.084011	1.079292	1.0761
51	1.056167	0.932685	0.808258	0.679271	1.104896	1.300666	1.174334	1.05667
52	1.023455	0.949611	0.97884	0.983959	1.06678	0.992618	0.973359	1.364743
53	1.056287	0.912884	0.974266	0.953504	0.945485	0.96669	1.059427	0.905414
54	1.050668	1.017581	1.455983	0.909525	1.078555	1.065457	0.980591	0.968465
55	0.99651	0.957173	0.906422	1.003843	1.04129	1.035585	1.13551	1.161548
56	0.876886	1.075059	1.187288	1.043822	0.926613	0.770966	0.956159	1.103195
57	1.056559	0.968585	0.916543	0.816389	0.874357	0.894561	0.854097	0.824511
58	1.051074	1.021576	0.815369	1.3102	0.855706	1.229412	1.006273	1.067563
59	0.922368	1.117383	1.055252	1.330753	0.494771	0.916178	1.058565	1.026558
60	1.02166	1.026773	1.151303	0.962406	1.027975	1.032208	0.956059	0.977705
61	1.056249	0.997423	1.124635	1.368404	1.005938	0.990598	0.981511	0.977724
62	1.023047	0.903488	0.833943	0.794628	1.036035	0.930285	0.890667	0.927655
63	1.010056	1.006749	1.040315	1.041235	1.024291	1.020567	1.00711	1.061064
64	1.137486	1.029762	0.997705	0.952091	0.987833	1.099377	1.050819	1.123147
65	0.935229	1.048763	0.871345	0.947602	0.92932	0.991327	1.031281	1.09951
66	1.017506	1.088076	1.088198	0.948655	1.18369	0.900165	0.918628	1.03875
67	0.963287	1.030174	1.158336	0.825278	0.825695	0.958025	0.838387	0.962251
68	0.91509	1.025808	1.00806	1.060749	1.111958	1.108445	0.891023	1.094083
69	0.895207	1.010878	1.075429	1.015432	0.894158	0.867727	0.800551	1.124661
70	0.681288	0.680744	0.973174	0.954347	0.899892	0.605565	0.890805	0.998582
71	1.03978	0.946668	0.772225	0.830976	0.86753	0.929505	0.613697	1.087008
72	1.085758	1.213792	1.327038	0.93929	1.123641	1.072896	1.04226	1.020583
73	1.076124	1.012666	0.7371	0.95871	0.922198	0.804098	1.061059	1.108391
74	1.076218	1.024462	1.062154	0.96069	1.009217	1.043447	1.024244	0.974453
75	1.077648	1.034892	0.998674	1.237808	1.0251	0.890654	1.18367	0.990263
76	1.055116	1.02635	1.057227	0.946021	1.068609	0.959431	0.9849	1.059363
77	1.047931	1.43982	1.348206	1.751842	1.030008	0.924636	0.9169	1.008787
78	1.024446	0.862893	0.957308	0.779837	0.923825	0.960345	0.927306	1.069227
79	1.024898	1.096593	0.809154	0.942175	0.986363	1.033291	1.087562	1.051589
80	1.046565	1.196708	0.852226	2.012155	0.861074	1.106224	0.959208	1.090482
81	1.021627	0.944034	1.171711	0.850746	1.033426	1.009538	0.783095	1.058279
82	1.0533	1.055763	1.023866	0.912349	0.99171	0.963123	0.995347	0.981962
83	1.222873	0.855063	1.079311	0.788625	1.187182	0.90693	0.981222	1.002553
84	1.086976	1.010024	1.151721	0.938441	1.081299	0.954957	0.975145	1.019298

3B. The relative price index (rp_{it})

Sector	1990	1991	1992	1993	1994	1995	1996	1997
1	1.17754	1.15857	0.90263	1.10407	0.94253	1.01966	1.03815	0.90778
2	0.96008	0.40941	1.47084	0.84377	1.10859	1.09559	1.08439	0.92120
3	0.89562	0.52736	0.77224	1.27558	0.74734	0.84358	1.13492	0.94524
4	1.00763	1.20672	0.73457	1.12804	1.20161	0.96606	0.93264	0.77921
5	0.93750	0.86367	0.81411	0.98794	1.24061	0.97832	1.08368	0.88212
6	1.33328	0.83566	1.19574	0.96309	0.98382	0.70025	0.69689	2.07511
7	0.89574	1.18860	0.79942	1.30113	0.91573	1.01490	0.98430	0.96648
8	0.90477	0.66517	0.93954	1.22242	1.59348	0.92942	0.95746	0.94890
9	0.90971	0.96851	1.31733	1.10313	1.80656	0.92454	0.92059	1.09427
10	0.90752	1.06377	1.36940	1.03493	1.12348	0.90762	1.04175	1.13146
11	0.93874	0.97339	1.25347	1.54921	2.04969	0.93889	1.03736	1.01168
12	0.98059	0.88856	1.29500	1.34256	0.97199	0.72414	1.12587	1.09816
13	0.89355	0.78109	1.10050	1.15964	0.95256	0.90310	1.02774	1.00933
14	1.15309	0.78733	0.87264	1.26315	1.07607	1.03913	0.98054	0.99241
15	1.02307	0.80412	0.77049	0.74433	1.51425	0.89864	1.26948	1.86856
16	0.98955	0.69582	0.75608	0.92729	0.87050	0.90573	0.95939	0.70289
17	0.97335	0.51791	0.91070	1.22751	1.30439	0.95806	0.92730	0.87768
18	1.08872	0.61222	0.97646	1.04962	1.38729	0.91847	1.00716	0.98923
19	0.96515	0.80838	0.91993	1.00083	1.11135	0.90094	0.90742	0.94792
20	1.07784	1.03698	0.87927	1.13731	1.15070	0.94796	0.96693	0.89043
21	1.05069	2.27977	0.77354	0.81826	1.13060	1.02853	0.95072	0.77921
22	1.10702	0.50563	0.66566	1.13346	1.19773	1.09945	1.47610	0.80734
23	0.97439	1.80416	1.53206	1.12102	0.95962	0.33515	1.30420	0.43170
24	1.57525	0.74420	0.98888	0.96355	0.95244	0.87863	1.03156	1.13894
25	1.06109	1.66453	0.92874	0.97153	1.14372	0.88978	1.07549	0.49813
26	1.03816	1.73561	0.94430	0.88814	2.02495	0.95511	0.89214	0.97851
27	0.95086	1.68841	1.28905	1.06245	1.17873	1.02120	0.97771	0.88215
28	0.91966	0.76638	1.19604	0.55523	2.13627	0.90087	0.98695	0.91837
29	1.09003	0.56677	1.18212	0.77042	0.88175	0.98836	1.06884	0.97271
30	0.96702	1.97472	0.97780	0.70272	1.10560	1.05193	0.91586	0.81296
31	0.95745	1.46351	1.20126	0.99501	0.90753	0.99764	0.96347	0.92947
32	1.02569	0.89664	0.88218	0.78462	0.89059	0.91952	0.96998	0.95325
33	1.00293	0.78734	0.87477	1.16959	1.06540	0.94804	1.01694	1.14018
34	0.95374	0.81696	0.91640	1.30780	1.32423	0.96097	0.95313	0.96692
35	1.22549	1.31803	0.90167	1.12664	1.08904	1.06414	1.17956	0.93741
36	1.08617	0.98752	1.09053	1.27940	1.32915	0.95962	1.06793	0.97476
37	1.02358	1.69329	1.22501	0.88719	1.02556	0.94465	0.97841	0.97869
38	1.02502	1.40704	1.05772	0.75148	1.00878	0.89246	1.09912	0.83749
39	1.00788	0.91004	0.98109	1.24899	0.91762	0.86959	0.93483	0.68345
40	1.07484	1.02520	1.11161	1.13812	0.91281	0.90507	1.09818	1.28968
41	0.92469	1.47050	1.15478	1.16615	1.25334	0.88866	0.85605	1.04151
42	0.98802	1.29327	0.88916	0.95255	1.32153	0.97144	1.02260	0.89007
43	0.93817	0.68047	0.94038	0.88201	1.23996	0.98756	1.09397	0.79982

Sector	1990	1991	1992	1993	1994	1995	1996	1997
44	0.97060	0.78137	0.90902	1.00631	1.23316	0.85809	1.18383	0.80489
45	1.04774	0.75579	0.97143	1.18055	1.19711	0.87425	1.29457	0.76970
46	1.06551	0.57791	1.20602	0.97379	0.99450	0.84324	0.89394	0.99572
47	1.02100	1.01627	0.95251	0.90910	1.09168	0.90388	1.10119	0.81975
48	0.89451	0.65830	0.87419	1.22377	1.09203	0.90600	1.12711	0.89655
49	0.93949	0.60580	0.89726	0.98255	1.31937	0.90667	1.08250	0.80165
50	0.96732	1.35879	1.20040	0.89282	1.49381	1.11619	1.20029	0.69246
51	1.14713	0.43284	0.49588	0.92329	0.94532	0.95857	1.19220	1.24395
52	1.01892	0.78034	0.75196	1.44188	0.99865	0.99336	1.00309	0.86615
53	0.89398	0.71505	0.82422	1.28763	1.05274	0.93087	1.07636	0.63622
54	0.93988	1.12358	0.91442	0.93159	1.30411	0.97999	0.96608	0.79620
55	0.90579	0.97612	0.99951	0.89697	1.22628	1.01278	1.06094	0.81108
56	1.02583	0.71390	1.01683	0.91621	1.24277	0.99609	1.06644	1.13505
57	0.90794	1.10749	1.15290	0.96823	0.76382	0.89850	0.95893	0.88802
58	0.93086	0.88684	0.93478	1.28062	0.56826	0.87652	1.05653	1.19162
59	0.93509	0.85047	0.67546	1.22875	0.93550	0.78392	1.07915	0.92131
60	0.95090	0.98571	0.80780	1.15297	0.98126	0.85523	0.94845	0.93326
61	1.04262	0.58356	0.66956	1.16277	1.42053	1.00784	1.16295	0.76900
62	0.72463	2.07704	1.44963	0.69642	1.08967	0.95410	0.74188	1.30578
63	0.92061	0.88831	0.99247	0.93929	1.03337	1.02044	1.01098	0.95823
64	0.94498	2.80833	0.98146	0.81717	0.81478	1.15528	1.02245	1.03932
65	0.91731	1.00205	1.40216	1.02951	1.17588	1.29539	1.03515	1.16493
66	0.89429	2.22574	0.99055	1.15138	0.89285	0.78349	1.01995	0.86983
67	1.05921	1.42035	1.16133	0.93336	0.90913	0.87109	1.13615	1.07791
68	1.00773	1.05378	1.24902	1.30372	0.82343	0.90000	1.12037	0.97567
69	1.29563	1.16254	1.08664	2.20305	0.92043	1.04888	1.10038	1.77979
70	0.94682	2.54953	1.25204	1.91101	1.01541	0.89129	1.40781	0.94897
71	1.06148	1.17037	1.13303	1.15948	1.58727	0.93963	1.09196	0.94984
72	0.99473	0.82406	0.65057	1.55726	1.28054	1.05631	1.05870	0.82726
73	1.06261	0.76495	0.81107	0.95370	1.02097	0.97258	0.98265	1.03746
74	1.01693	0.75669	0.72902	1.27077	0.94918	1.13391	1.13359	1.05872
75	1.04634	0.86026	1.23655	1.02292	0.96970	1.10992	0.72275	0.70766
76	0.89196	0.59184	0.72054	0.95965	0.94162	1.10737	0.96803	4.45100
77	0.89207	0.58215	0.85930	1.49395	0.80202	0.98469	1.00792	0.85831
78	0.91209	0.81289	0.80935	1.17247	1.09999	1.11653	0.99792	0.92167
79	0.88744	0.57673	1.06994	0.97849	1.13703	1.02362	1.03079	0.99882
80	0.96043	1.04472	0.76315	1.50807	0.93091	1.02990	1.03858	0.79515
81	0.92231	1.06182	0.83540	0.97809	0.99727	1.19159	0.92034	0.86052
82	1.04507	0.81078	0.81461	0.97125	1.07551	1.05926	0.93341	0.84605
83	0.90648	1.00199	0.81397	0.90846	1.00621	1.00288	1.01134	0.82581
84	0.89666	1.18116	0.71554	1.03705	1.10430	1.07288	1.04288	0.97866

3B. The relative price index (rp_{it}) - continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005
1	0.790498	0.978165	1.068432	0.950069	0.957691	1.065295	1.016423	0.811006
2	1.047436	0.635344	0.948942	1.197322	0.969126	0.841766	0.922931	1.00255
3	0.84381	1.071139	0.855703	1.107796	1.087482	1.103678	0.968609	1.150028
4	1.091583	1.107712	1.032295	0.928062	0.923706	1.076467	0.98486	0.920083
5	1.051706	0.98034	1.029285	0.994744	1.023445	1.2245	0.9765	0.940748
6	1.292148	0.983596	1.070492	1.01097	1.122039	0.816766	1.024622	0.981313
7	1.000442	0.940786	1.192078	0.994805	0.833405	0.791519	0.984589	1.096361
8	0.861296	0.827352	0.90229	1.018087	0.876786	0.968432	0.95632	0.95433
9	0.847641	0.835057	1.087585	1.023403	1.01375	0.841803	1.003087	0.91489
10	0.826925	0.841734	0.992247	0.968852	1.057992	0.927717	0.924637	1.009272
11	0.804125	0.923304	1.237291	0.866551	0.92686	0.813692	1.027562	0.969621
12	0.699334	0.862785	1.171423	1.072725	0.940218	1.014786	1.02443	0.903222
13	0.860305	0.769407	1.017005	1.001677	0.905003	0.85164	0.980797	1.072602
14	0.772183	0.900925	1.052942	1.012226	0.911186	0.948911	1.033814	0.981131
15	0.976245	1.205264	0.76485	0.887332	0.958215	1.072356	0.884785	0.968082
16	0.885145	0.908384	1.221448	1.038859	0.988941	0.952588	1.00477	1.050437
17	0.795499	0.890024	0.974188	1.017954	1.016014	0.971127	1.058881	0.947936
18	0.776884	0.901889	0.872753	0.979181	0.959638	0.92602	1.050649	0.960414
19	0.862492	0.902626	0.951558	1.260177	1.066934	1.041695	1.01432	0.993583
20	0.826432	0.91191	1.0558	1.034891	1.051793	0.917462	1.021526	0.916746
21	1.06478	0.966785	1.096236	1.002515	1.064715	0.868898	0.937602	0.855314
22	0.889841	0.997158	0.888852	0.953207	0.994393	0.955771	0.971353	0.981472
23	0.974868	0.851941	1.165412	0.985517	0.969143	0.913169	1.205884	0.79328
24	1.01835	0.844422	1.08756	0.922872	1.175486	0.779149	0.891445	1.355149
25	0.932866	0.910238	1.070362	0.957255	1.0545	1.018177	1.068857	0.898326
26	0.955762	0.996335	0.961976	1.000669	0.974017	0.902575	0.995033	0.978056
27	1.017279	0.848929	1.099499	1.027411	0.985901	0.859908	1.015946	0.934501
28	1.000584	0.853238	0.970518	0.874867	0.945909	0.882736	0.963377	0.937809
29	0.789507	0.968629	0.97227	0.953587	0.991293	0.854544	0.917802	1.17204
30	0.882413	0.833665	0.908259	0.955602	0.896083	0.899352	0.950015	1.066311
31	0.895889	0.777143	1.095603	0.987217	1.120604	0.979168	1.004179	1.038443
32	0.947453	0.840135	1.145947	1.013371	1.079586	0.968654	1.03588	0.997848
33	0.894707	0.937137	0.920819	1.065058	0.932992	0.912686	1.01697	1.003304
34	0.922865	0.937385	0.902913	0.966925	0.948784	0.923087	1.027973	1.004832
35	0.954131	1.002184	1.147927	1.01767	0.978472	0.978139	1.011338	0.907407
36	1.006748	0.834345	0.947263	1.141238	0.975944	0.869475	1.11735	0.978381
37	0.999344	0.95894	1.051582	1.013103	1.023924	0.887428	1.061622	1.007087
38	0.987153	0.844949	1.020467	1.114621	1.061508	0.945886	1.05982	1.021983
39	0.907562	0.954603	1.09063	0.997795	0.926407	0.959991	0.984038	0.964002
40	0.916216	0.835727	0.977962	1.028278	0.902149	0.951569	0.997995	1.051719
41	0.795208	0.910403	1.114795	0.99633	0.858268	1.003956	1.368336	0.828803
42	0.808045	0.949718	1.092753	1.025551	0.947369	0.867128	1.06035	0.998275
43	0.810678	0.873196	1.086094	1.147452	0.921826	0.86344	1.001501	0.912625
44	0.862188	0.879136	1.018356	1.022863	1.036177	1.225299	1.041564	1.03748
45	0.913565	0.810074	1.078731	1.126415	0.9736	0.859228	1.168639	1.062384
46	0.917849	0.927141	1.186728	1.122204	1.011422	0.938453	0.794484	1.066497

Sector	1998	1999	2000	2001	2002	2003	2004	2005
47	1.225305	0.853524	1.033467	1.062702	1.011468	0.845487	1.087497	1.129047
48	1.586233	0.937894	1.026534	1.166777	1.07099	0.940076	1.040891	1.035053
49	0.86642	1.017624	0.919821	1.174435	0.902588	0.964518	1.00866	1.037498
50	0.86506	0.910068	0.946922	0.979511	1.088127	0.988004	1.002055	0.970151
51	0.828229	0.833707	1.152082	0.865763	1.069795	1.001801	1.030579	1.166633
52	0.850333	0.99153	1.063733	1.141686	1.063213	0.896043	1.024719	0.976241
53	0.987179	0.900711	0.930849	0.900342	0.964667	0.967	1.02458	0.945522
54	0.896218	0.858177	1.014191	1.032331	1.045292	0.916654	1.008207	0.892656
55	0.833626	0.890646	1.173528	1.239655	1.156244	1.031573	1.097525	1.00608
56	0.785589	0.980761	1.074225	1.046456	1.089692	0.979418	1.044948	1.09329
57	1.056706	1.126389	0.962277	1.089589	1.131988	1.431644	1.016624	0.979792
58	1.038637	1.092923	0.918316	1.182187	1.079948	1.000708	1.096377	1.065513
59	0.872362	0.906757	0.861954	1.030814	0.922196	0.918122	1.150111	1.002335
60	0.972574	0.88107	1.209144	0.997413	0.979525	0.974669	0.98683	0.953803
61	0.955931	0.888719	0.846492	0.9776	0.997821	0.996393	0.970934	1.01242
62	0.98043	1.544356	1.05138	1.048125	1.18809	0.952769	0.977714	1.012546
63	0.96373	1.01013	0.93751	1.03407	1.06385	1.001536	1.022599	1.029518
64	1.081845	1.009049	0.921079	0.92285	0.956191	0.917631	1.021642	0.971048
65	1.018683	1.030277	0.861469	0.963715	0.986046	0.898205	0.987897	1.059546
66	1.101346	0.999005	1.391875	0.852653	1.030957	0.96085	0.891708	1.224026
67	1.072901	1.025786	1.04429	1.155521	1.005198	0.981964	0.964553	0.734549
68	1.012784	1.00485	0.910992	0.974209	1.063634	1.04341	0.968767	1.004559
69	0.713021	0.896242	1.1394	1.099997	0.820188	0.844541	0.907408	1.060178
70	0.955742	1.287645	1.194018	0.675512	1.023799	0.848771	1.044425	0.848767
71	1.385335	1.346147	0.9751	1.000769	0.989398	1.116815	0.99544	0.949323
72	1.168335	1.010611	1.015543	0.920321	0.93889	0.976073	1.029414	1.008175
73	1.343601	1.070186	0.929856	0.891746	1.113983	0.832417	0.977627	1.070026
74	1.376247	1.213675	1.000971	1.025986	0.862021	0.960185	1.011289	0.923283
75	0.969014	0.978272	0.885664	1.020187	1.154944	0.910891	1.04099	0.913859
76	1.025915	1.035219	0.989078	0.976155	1.033545	0.911252	1.005857	1.065652
77	1.062614	1.130308	1.274093	1.096147	0.992673	0.888961	0.968468	1.01161
78	1.082876	0.966532	0.90041	0.970684	1.04622	1.102415	1.007009	0.89355
79	1.127055	1.126389	0.810687	0.88886	1.046899	1.003741	0.995935	0.919098
80	1.351179	1.086644	0.926594	1.135488	0.955174	0.9024	0.992509	1.14724
81	1.315648	1.018748	1.09814	0.979509	1.02175	1.710967	1.014372	1.057136
82	1.26362	1.07979	0.944735	0.994116	1.055429	1.161591	1.096347	1.055934
83	1.199887	1.109383	0.919782	0.98704	1.072406	1.333968	1.089641	1.113558
84	1.193077	1.241044	0.956274	0.881071	0.96809	1.021122	1.029151	1.066366

3C. The weighted relative output index (wrq_{it})

Sector	1990	1991	1992	1993	1994	1995	1996	1997
1	0.099079	0.133496	0.138458	0.142884	0.160129	0.143903	0.141936	0.16512
2	0.084885	0.067623	0.030857	0.046058	0.035443	0.043618	0.037942	0.038062
3	0.030436	0.023255	0.013276	0.010887	0.013987	0.009869	0.006892	0.006196
4	0.002359	0.001942	0.002134	0.001453	0.001641	0.001935	0.001805	0.001463
5	0.004766	0.00375	0.00355	0.002552	0.002487	0.002967	0.002781	0.003324
6	0.009075	0.016888	0.014806	0.017459	0.015959	0.014878	0.007823	0.002348
7	0.02024	0.01697	0.020808	0.014754	0.019569	0.019614	0.021355	0.020988
8	0.00295	0.002549	0.003746	0.003591	0.004297	0.008023	0.008487	0.009772
9	0.00143	0.001586	0.00181	0.002337	0.001959	0.003957	0.004565	0.003738
10	0.003913	0.00391	0.003734	0.005319	0.005951	0.006705	0.006522	0.007989
11	0.000711	0.000643	0.000799	0.001178	0.001337	0.003017	0.003978	0.003841
12	0.004575	0.005313	0.003806	0.004335	0.005221	0.00283	0.002081	0.00221
13	0.016773	0.014822	0.011396	0.010926	0.012263	0.011195	0.013805	0.013476
14	0.015493	0.020123	0.0173	0.013873	0.017964	0.023765	0.02959	0.030908
15	0.011179	0.005807	0.004304	0.003212	0.001802	0.002296	0.001889	0.002614
16	0.040801	0.043739	0.024186	0.017631	0.01585	0.013494	0.013926	0.013303
17	0.019751	0.021491	0.011939	0.008365	0.013334	0.017865	0.01894	0.019694
18	0.001668	0.001868	0.001146	0.000895	0.000887	0.001202	0.001083	0.001242
19	0.010514	0.009952	0.007613	0.006043	0.00503	0.005393	0.005745	0.004972
20	0.008013	0.008577	0.010029	0.007563	0.008833	0.009593	0.012773	0.011389
21	0.004462	0.00256	0.005352	0.003694	0.002799	0.003458	0.004226	0.003509
22	0.003628	0.004004	0.002834	0.001727	0.002409	0.002797	0.003812	0.005746
23	0.001026	0.000783	0.001532	0.003976	0.003902	0.003472	0.001426	0.001992
24	0.010676	0.017771	0.031517	0.035679	0.034811	0.031567	0.02692	0.027481
25	0.000401	0.000919	0.002095	0.002094	0.001815	0.002148	0.001492	0.000794
26	0.002023	0.002312	0.003861	0.002619	0.001536	0.002795	0.001718	0.001318
27	0.001808	0.002037	0.004034	0.004974	0.004776	0.005006	0.004682	0.003789
28	0.002995	0.002827	0.002277	0.002666	0.001272	0.002267	0.001667	0.001662
29	0.00552	0.005773	0.00272	0.00313	0.002227	0.001904	0.00156	0.001377
30	0.001388	0.001378	0.002817	0.002249	0.001395	0.001569	0.001689	0.001322
31	0.003753	0.003002	0.004198	0.005193	0.004223	0.003863	0.00412	0.003236
32	0.010827	0.009546	0.006324	0.005155	0.003434	0.002918	0.002662	0.002564
33	0.003376	0.00373	0.003369	0.002234	0.00238	0.003109	0.003151	0.00326
34	0.001166	0.001059	0.000891	0.000809	0.001011	0.001488	0.002257	0.00193
35	0.000215	0.00027	0.000339	0.000294	0.000335	0.000438	0.000451	0.000506
36	0.00027	0.000313	0.000571	0.000875	0.001293	0.002016	0.00176	0.001588
37	0.002304	0.001911	0.003372	0.004096	0.003434	0.003744	0.003491	0.003479
38	0.010393	0.008971	0.010814	0.00847	0.004661	0.003183	0.002375	0.002396
39	0.001157	0.001032	0.000963	0.000863	0.00101	0.000513	0.000204	0.000144
40	0.001058	0.00086	0.000889	0.00156	0.001549	0.001358	0.001219	0.00117
41	0.004134	0.002749	0.003867	0.004208	0.005508	0.006536	0.007599	0.006518
42	0.007907	0.01025	0.010443	0.008867	0.008345	0.010491	0.01001	0.010681
43	0.007966	0.007517	0.004152	0.002643	0.002348	0.003008	0.002557	0.002834
44	0.024977	0.022231	0.015277	0.011931	0.01169	0.013609	0.011804	0.014517
45	0.006199	0.006083	0.004043	0.002813	0.003017	0.003857	0.003383	0.00426
46	0.014332	0.01398	0.004948	0.005297	0.005017	0.004384	0.001857	0.001649

Sector	1990	1991	1992	1993	1994	1995	1996	1997
47	0.008455	0.005311	0.004757	0.004418	0.00391	0.004031	0.003134	0.002344
48	0.006811	0.00452	0.002342	0.001532	0.001612	0.001399	0.00084	0.000955
49	0.027033	0.021286	0.013344	0.008254	0.00779	0.010146	0.008098	0.008534
50	0.002451	0.002264	0.002552	0.001478	0.001253	0.002113	0.002592	0.002826
51	0.003025	0.002573	0.000712	0.000622	0.000576	0.000614	0.000857	0.001051
52	0.011246	0.009164	0.005702	0.003009	0.006704	0.00804	0.008302	0.009056
53	0.009691	0.008618	0.003929	0.0039	0.00647	0.006497	0.00604	0.007284
54	0.01444	0.006236	0.005056	0.004057	0.003263	0.004025	0.002345	0.002309
55	0.007819	0.011115	0.009493	0.009115	0.007659	0.009444	0.0114	0.012862
56	0.004354	0.003495	0.003423	0.001941	0.001616	0.002382	0.00235	0.002603
57	0.003867	0.003276	0.002842	0.003416	0.002324	0.001375	0.002026	0.001983
58	0.002182	0.002163	0.000935	0.000955	0.00107	0.000459	0.000408	0.000472
59	0.002826	0.002422	0.001509	0.000505	0.000854	0.000506	0.000336	0.000253
60	0.009457	0.009199	0.009612	0.00826	0.010785	0.010885	0.009621	0.009453
61	0.005746	0.006661	0.00293	0.001269	0.001944	0.002605	0.001865	0.002612
62	0.010078	0.018701	0.034388	0.066369	0.042063	0.041762	0.033677	0.022161
63	0.062074	0.052067	0.047135	0.056512	0.0654	0.067801	0.067078	0.059092
64	0.054795	0.043603	0.11975	0.105873	0.086376	0.078621	0.093588	0.093847
65	0.003767	0.002821	0.003108	0.003933	0.003665	0.008626	0.017102	0.016921
66	0.01032	0.007085	0.016303	0.011394	0.00926	0.007792	0.006253	0.004805
67	0.016277	0.015067	0.020645	0.01952	0.016613	0.013854	0.011438	0.012413
68	0.028009	0.028396	0.032261	0.044742	0.053822	0.041533	0.039497	0.044463
69	0.002093	0.002746	0.002711	0.002756	0.006414	0.006065	0.005477	0.005583
70	0.002965	0.001632	0.002812	0.002154	0.005781	0.00604	0.00475	0.004562
71	0.001264	0.001334	0.002643	0.002636	0.003753	0.005606	0.003233	0.003042
72	0	0.002045	0.000908	0.00086	0.001378	0.001929	0.002175	0.002049
73	0.001408	0.003081	0.002691	0.002248	0.002787	0.002723	0.00327	0.003311
74	0.007285	0.010835	0.009649	0.008566	0.011067	0.010609	0.015328	0.018564
75	0.027475	0.032391	0.042025	0.050619	0.050925	0.047036	0.043056	0.025999
76	0.012228	0.012944	0.020164	0.014789	0.015644	0.014733	0.015644	0.016428
77	0.002352	0.002849	0.001771	0.001374	0.001945	0.001489	0.002328	0.002148
78	0.007871	0.008313	0.006216	0.003522	0.004072	0.004726	0.005014	0.004653
79	0.012465	0.012268	0.008289	0.006769	0.005666	0.006437	0.007023	0.007053
80	0.001204	0.003089	0.00255	0.003991	0.005922	0.006395	0.008404	0.007804
81	0.032214	0.030884	0.039243	0.032363	0.033581	0.032869	0.034981	0.033639
82	0.026468	0.036412	0.03164	0.025832	0.024354	0.025465	0.028542	0.026066
83	0.023893	0.023982	0.025225	0.02033	0.01949	0.018928	0.01998	0.019225
84	0.016246	0.012656	0.014209	0.009478	0.010986	0.013052	0.017139	0.018573

3C. The weighted relative output index (wrq_{it}) - continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005
1	0.13314	0.116813	0.086575	0.117619	0.095511	0.094144	0.115542	0.091468
2	0.042013	0.039832	0.024352	0.022736	0.026934	0.023778	0.018401	0.014535
3	0.004867	0.004261	0.00315	0.002998	0.003237	0.003603	0.003395	0.003051
4	0.0012	0.001621	0.001852	0.001686	0.001542	0.001281	0.001522	0.001133
5	0.003086	0.00307	0.003425	0.003385	0.003494	0.003698	0.003762	0.003776
6	0.006982	0.011343	0.011716	0.013328	0.012248	0.013208	0.01073	0.010021
7	0.021154	0.025113	0.024935	0.032529	0.030933	0.026062	0.021678	0.019887
8	0.00893	0.005828	0.005075	0.004324	0.004241	0.004451	0.005434	0.005005
9	0.003726	0.002947	0.002503	0.002363	0.002543	0.002073	0.001812	0.001719
10	0.008619	0.006202	0.005069	0.006381	0.006527	0.006961	0.006473	0.006101
11	0.003706	0.003266	0.004918	0.005674	0.006094	0.008493	0.006754	0.005938
12	0.002506	0.001182	0.001182	0.000457	0.000519	0.000554	0.00049	0.000478
13	0.01237	0.010662	0.010802	0.011276	0.011509	0.010437	0.008784	0.009024
14	0.029957	0.015296	0.014164	0.019149	0.018063	0.020661	0.017219	0.01862
15	0.004652	0.001814	0.002381	0.001749	0.001359	0.001236	0.001046	0.000669
16	0.009154	0.008072	0.007424	0.008298	0.008786	0.008658	0.007937	0.007231
17	0.016692	0.014556	0.015166	0.015182	0.015321	0.015056	0.013665	0.013277
18	0.001264	0.000833	0.000735	0.000849	0.000845	0.000795	0.000672	0.000676
19	0.004927	0.004495	0.005016	0.004491	0.005596	0.005855	0.00562	0.00523
20	0.009893	0.010078	0.009697	0.009809	0.010213	0.010799	0.011123	0.011379
21	0.00281	0.003435	0.003745	0.004178	0.004847	0.004892	0.003946	0.003698
22	0.004682	0.005411	0.005596	0.005567	0.005504	0.00539	0.005355	0.005456
23	0.000839	0.000419	0.000378	0.000381	0.000361	0.000351	0.000327	6.93E-05
24	0.032608	0.029561	0.025396	0.023109	0.021989	0.02498	0.018322	0.016983
25	0.000388	0.000293	0.000271	0.000211	0.000152	0.00017	0.000186	0.00016
26	0.00136	0.001594	0.001683	0.001661	0.001593	0.001415	0.001178	0.001315
27	0.003514	0.003831	0.003246	0.003398	0.003591	0.003463	0.002838	0.002974
28	0.001551	0.001453	0.001076	0.000943	0.000956	0.000943	0.000866	0.000817
29	0.001351	0.000922	0.000777	0.000816	0.000739	0.000657	0.000531	0.000396
30	0.000952	0.000798	0.000606	0.000524	0.000522	0.000408	0.000339	0.000325
31	0.003166	0.002596	0.001704	0.001966	0.002047	0.0027	0.002559	0.002376
32	0.002575	0.002753	0.003096	0.003987	0.004259	0.004914	0.004996	0.005471
33	0.003644	0.002964	0.002797	0.002453	0.002768	0.002279	0.00213	0.001997
34	0.001967	0.001824	0.001654	0.001404	0.001322	0.001221	0.001087	0.000982
35	0.000498	0.000594	0.000787	0.000847	0.000665	0.000673	0.00069	0.000588
36	0.001632	0.001525	0.001278	0.001375	0.00127	0.001106	0.000974	0.001083
37	0.003586	0.003634	0.003434	0.003279	0.003417	0.002976	0.002815	0.00286
38	0.002126	0.002162	0.001777	0.001719	0.002043	0.002195	0.002277	0.002415
39	0.000106	0.000109	0.000157	0.00017	0.000176	0.000165	0.000178	0.000268
40	0.001547	0.001089	0.00083	0.00082	0.000798	0.000726	0.000724	0.000658
41	0.007018	0.003979	0.004021	0.004073	0.004413	0.002889	0.003444	0.004368
42	0.009519	0.005458	0.006487	0.007373	0.006703	0.005168	0.004148	0.004232
43	0.001805	0.001082	0.001013	0.001008	0.001327	0.00091	0.000727	0.000837
44	0.012106	0.010952	0.009711	0.010293	0.01052	0.008927	0.011211	0.012205
45	0.003336	0.002914	0.003463	0.00356	0.003481	0.003125	0.002399	0.002518
46	0.000888	0.000833	0.001122	0.001106	0.001154	0.001175	0.001378	0.001222

Sector	1998	1999	2000	2001	2002	2003	2004	2005
47	0.00196	0.00185	0.001352	0.001231	0.001536	0.000914	0.000752	0.000658
48	0.000899	0.000999	0.000946	0.000893	0.001114	0.00119	0.001136	0.00138
49	0.006676	0.005735	0.005252	0.004925	0.005284	0.00476	0.004184	0.003638
50	0.002061	0.00177	0.002236	0.00177	0.001858	0.00219	0.002337	0.00252
51	0.001379	0.001066	0.000718	0.000562	0.000537	0.000747	0.00088	0.000958
52	0.008013	0.006477	0.006285	0.006573	0.008006	0.008447	0.007372	0.010307
53	0.004886	0.004408	0.003868	0.00343	0.00292	0.002722	0.00279	0.002588
54	0.001928	0.00176	0.002198	0.002026	0.002256	0.002512	0.002259	0.002206
55	0.010377	0.008288	0.00669	0.007875	0.010165	0.012168	0.014262	0.018178
56	0.002586	0.002186	0.002545	0.002852	0.002765	0.002323	0.002176	0.002508
57	0.001857	0.001903	0.001964	0.001542	0.001469	0.001487	0.001819	0.001525
58	0.00059	0.000627	0.000559	0.000672	0.000679	0.000902	0.000909	0.001063
59	0.000214	0.000209	0.0002	0.000229	0.000117	9.88E-05	9.6E-05	0.000113
60	0.008997	0.008993	0.009121	0.010606	0.010875	0.010992	0.010249	0.009887
61	0.002118	0.002021	0.00202	0.002338	0.002299	0.002272	0.002223	0.00211
62	0.02954	0.026228	0.034126	0.02876	0.03126	0.03447	0.028561	0.025918
63	0.057089	0.055443	0.058256	0.056823	0.060187	0.065329	0.065933	0.071526
64	0.110745	0.123494	0.124311	0.108928	0.099303	0.10436	0.100689	0.115514
65	0.018402	0.019679	0.017664	0.014408	0.012904	0.01261	0.011688	0.012693
66	0.004245	0.005092	0.005535	0.007302	0.00737	0.006838	0.006039	0.005593
67	0.012866	0.014234	0.016911	0.014563	0.013895	0.013377	0.011019	0.010226
68	0.039625	0.041208	0.041736	0.040299	0.043656	0.051455	0.047866	0.050724
69	0.00888	0.006407	0.006174	0.007138	0.007021	0.004995	0.003379	0.003448
70	0.002944	0.001917	0.002402	0.002735	0.001663	0.001031	0.00078	0.000813
71	0.002999	0.003937	0.004092	0.003313	0.002877	0.002645	0.001814	0.001962
72	0.001837	0.002608	0.003497	0.003334	0.003447	0.003472	0.003534	0.003712
73	0.00369	0.005025	0.003964	0.003531	0.002904	0.0026	0.002298	0.00249
74	0.021113	0.029797	0.038407	0.036904	0.038212	0.034361	0.033813	0.033315
75	0.019791	0.019866	0.019406	0.021258	0.022232	0.022862	0.024664	0.025421
76	0.077011	0.081167	0.088824	0.083045	0.086629	0.085878	0.07712	0.082161
77	0.001929	0.002954	0.004501	0.010038	0.011333	0.010399	0.008481	0.008284
78	0.004385	0.004102	0.003795	0.002662	0.002388	0.002398	0.002453	0.002641
79	0.007207	0.008916	0.008125	0.006201	0.005437	0.00588	0.006422	0.006725
80	0.006483	0.010492	0.009715	0.0181	0.017697	0.018694	0.016191	0.01752
81	0.029519	0.036698	0.043801	0.040888	0.04139	0.042681	0.05722	0.061413
82	0.023187	0.030963	0.034227	0.029478	0.029062	0.029534	0.034166	0.036776
83	0.019379	0.019902	0.023827	0.01727	0.020237	0.019677	0.02577	0.028147
84	0.019721	0.023788	0.033997	0.030485	0.029044	0.026843	0.026744	0.02805

3D. The weighted relative price index (wrp_{it})

Sector	1990	1991	1992	1993	1994	1995	1996	1997
1	0.05514	0.134768	0.137237	0.138077	0.149955	0.154419	0.152231	0.133944
2	0.081125	0.033266	0.040031	0.038321	0.043449	0.043195	0.051786	0.037953
3	0.016746	0.014333	0.00931	0.013087	0.010467	0.008848	0.009442	0.007403
4	0.002665	0.00286	0.001692	0.001769	0.001986	0.001911	0.001743	0.001314
5	0.004478	0.003851	0.0026	0.00292	0.003154	0.003032	0.003143	0.002661
6	0.041969	0.013595	0.020439	0.017076	0.016659	0.011126	0.007386	0.007841
7	0.015039	0.021491	0.015917	0.021627	0.017778	0.018206	0.019608	0.020314
8	0.002452	0.00177	0.001566	0.004306	0.007055	0.006385	0.007135	0.007721
9	0.000668	0.001256	0.001989	0.002632	0.004696	0.003283	0.003366	0.004605
10	0.003726	0.003767	0.005599	0.005295	0.006237	0.006089	0.006335	0.007697
11	0.000398	0.000648	0.000772	0.001553	0.003774	0.002582	0.002937	0.00418
12	0.003542	0.003975	0.00601	0.006621	0.005706	0.003688	0.002306	0.002577
13	0.016434	0.011672	0.012525	0.014553	0.012172	0.010585	0.010384	0.01434
14	0.01886	0.014023	0.013591	0.019082	0.019017	0.020155	0.024198	0.028833
15	0.006624	0.009169	0.003537	0.00247	0.003651	0.002461	0.002618	0.004486
16	0.043956	0.02801	0.02262	0.016969	0.014353	0.012539	0.011718	0.009404
17	0.023509	0.009927	0.009965	0.013356	0.013508	0.01672	0.015861	0.015435
18	0.001459	0.001109	0.001098	0.001175	0.001315	0.001134	0.001111	0.001081
19	0.012897	0.008179	0.007275	0.007014	0.006778	0.005054	0.004406	0.004948
20	0.012768	0.00893	0.007687	0.010036	0.009982	0.009668	0.008788	0.011012
21	0.004322	0.010656	0.004439	0.00339	0.003446	0.003266	0.003379	0.003135
22	0.004338	0.002025	0.001325	0.00214	0.002365	0.003183	0.004537	0.004548
23	0.000871	0.001799	0.002128	0.002634	0.004314	0.001259	0.001517	0.000804
24	0.025618	0.011587	0.029386	0.030045	0.030826	0.028466	0.028827	0.031661
25	0.003417	0.000706	0.001396	0.001892	0.002347	0.001854	0.002055	0.000801
26	0.002124	0.003634	0.003725	0.003241	0.004751	0.002982	0.00238	0.001502
27	0.002878	0.002893	0.004359	0.005528	0.006283	0.005769	0.004995	0.004044
28	0.00228	0.002104	0.002547	0.001513	0.003189	0.002456	0.002014	0.001513
29	0.005024	0.0034	0.003802	0.002479	0.002145	0.001948	0.00201	0.001624
30	0.001382	0.002642	0.002615	0.001937	0.001762	0.001629	0.00151	0.001259
31	0.000252	0.005243	0.005188	0.005021	0.004729	0.003836	0.003711	0.003695
32	0.011985	0.009928	0.007423	0.00438	0.003633	0.002822	0.002601	0.002465
33	0.004325	0.002658	0.002526	0.00345	0.002807	0.002412	0.002995	0.003659
34	0.001754	0.000906	0.000779	0.001068	0.001414	0.001292	0.001362	0.002083
35	0.000506	0.000346	0.000316	0.000345	0.000364	0.000389	0.00055	0.0005
36	0.000465	0.000289	0.000331	0.000797	0.0015	0.001655	0.002065	0.001834
37	0.002441	0.003981	0.003896	0.003667	0.003758	0.003338	0.003458	0.003347
38	0.011647	0.014945	0.013125	0.008602	0.006476	0.00421	0.00312	0.002189
39	0.000765	0.001058	0.000906	0.001181	0.000998	0.000809	0.000417	0.000131
40	0.001816	0.001162	0.000963	0.001125	0.001634	0.001284	0.001349	0.001729
41	0.003412	0.005605	0.004588	0.005211	0.006203	0.006155	0.004969	0.006784
42	0.013357	0.009774	0.013952	0.009118	0.011109	0.010513	0.01061	0.009148
43	0.007967	0.00507	0.004729	0.003446	0.002915	0.002885	0.003248	0.00224
44	0.031732	0.018887	0.015522	0.013984	0.014932	0.012412	0.013816	0.011263
45	0.007043	0.004894	0.004391	0.00464	0.00401	0.003169	0.004362	0.003375
46	0.017403	0.008799	0.009579	0.005815	0.005173	0.004222	0.003302	0.001656
47	0.004812	0.008747	0.005054	0.004122	0.004422	0.003871	0.00401	0.002833

Sector	1990	1991	1992	1993	1994	1995	1996	1997
48	0.006867	0.003999	0.002557	0.002508	0.002064	0.0016	0.001427	0.00085
49	0.024771	0.01534	0.011374	0.011772	0.010791	0.009351	0.009951	0.007037
50	0.002183	0.003213	0.00363	0.002737	0.001987	0.002097	0.002829	0.002158
51	0.005753	0.001498	0.000543	0.000326	0.000547	0.000524	0.000701	0.001272
52	0.012415	0.008915	0.005286	0.006187	0.00437	0.006673	0.008006	0.007223
53	0.011626	0.006176	0.004993	0.004173	0.005332	0.006362	0.006506	0.004142
54	0.015759	0.015204	0.006299	0.00431	0.004971	0.004184	0.003808	0.001806
55	0.007839	0.006893	0.01066	0.008516	0.010112	0.009544	0.010141	0.009823
56	0.005141	0.003179	0.002494	0.003192	0.002229	0.002007	0.002529	0.002849
57	0.006817	0.003877	0.004112	0.003174	0.002548	0.0016	0.001184	0.001728
58	0.003251	0.001796	0.001763	0.00112	0.000701	0.000535	0.000425	0.000515
59	0.001904	0.002241	0.001368	0.001253	0.000585	0.000628	0.000428	0.000335
60	0.015152	0.008838	0.007201	0.008959	0.009425	0.009082	0.008824	0.008527
61	0.005249	0.003486	0.002559	0.002283	0.002113	0.002792	0.003051	0.00167
62	0.010252	0.01223	0.047045	0.034036	0.044113	0.041597	0.029556	0.033109
63	0.055176	0.050613	0.045125	0.043971	0.05532	0.0692	0.069901	0.06507
64	0.04843	0.144983	0.118144	0.096106	0.071092	0.081583	0.092808	0.099587
65	0.002967	0.003453	0.003896	0.004489	0.004801	0.005602	0.01156	0.020651
66	0.006423	0.020481	0.015356	0.018606	0.011813	0.0065	0.006223	0.005555
67	0.019463	0.024414	0.024431	0.022393	0.016704	0.013201	0.013703	0.014027
68	0.035151	0.029655	0.03674	0.052568	0.048442	0.040023	0.041852	0.043232
69	0.003049	0.003144	0.003411	0.006495	0.005637	0.006214	0.006996	0.01074
70	0.005686	0.007135	0.005122	0.006733	0.004214	0.00525	0.007574	0.006354
71	0.001595	0.001566	0.001739	0.003475	0.004893	0.005616	0.005749	0.003358
72	0	0.001306	0.001078	0.00092	0.00173	0.00187	0.002156	0.001907
73	0.001827	0.001141	0.001879	0.002083	0.002208	0.002777	0.0026	0.003338
74	0.008875	0.005589	0.005876	0.008945	0.010421	0.011952	0.013628	0.018421
75	0.023909	0.024658	0.033872	0.053194	0.050638	0.054997	0.037708	0.022051
76	0.010126	0.006436	0.005426	0.013952	0.013478	0.016368	0.015782	0.067498
77	0.002004	0.001218	0.001401	0.002275	0.001661	0.001541	0.001477	0.002016
78	0.008867	0.005818	0.005376	0.005903	0.004581	0.005019	0.005262	0.004618
79	0.009606	0.006361	0.007442	0.008684	0.007595	0.006617	0.006788	0.007241
80	0.001001	0.001205	0.002421	0.002936	0.005651	0.005697	0.006836	0.006949
81	0.025435	0.031454	0.026931	0.032088	0.031837	0.040042	0.036023	0.027741
82	0.025599	0.02236	0.023641	0.02505	0.027213	0.027839	0.025162	0.022571
83	0.016987	0.021637	0.019228	0.018666	0.018742	0.019735	0.019185	0.016709
84	0.012516	0.017155	0.010515	0.010551	0.010947	0.01306	0.014594	0.017516

3D. The weighted relative price index (wrp_{it}) - continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005
1	0.118274	0.103048	0.122067	0.087811	0.107021	0.097415	0.101998	0.095226
2	0.036659	0.027986	0.024012	0.027647	0.026382	0.021966	0.018484	0.017023
3	0.004933	0.004403	0.003905	0.002984	0.003612	0.003884	0.003854	0.003781
4	0.001242	0.001452	0.001853	0.001773	0.001446	0.001533	0.001359	0.001379
5	0.003072	0.003187	0.003098	0.003507	0.003446	0.004377	0.004426	0.003455
6	0.00852	0.007784	0.011735	0.012692	0.015057	0.011443	0.011369	0.010785
7	0.020257	0.019929	0.028163	0.029542	0.026969	0.020406	0.02032	0.023396
8	0.007972	0.006369	0.00435	0.004659	0.003859	0.0036	0.004125	0.004959
9	0.003461	0.00264	0.002677	0.002784	0.002451	0.002169	0.001752	0.001662
10	0.007461	0.006005	0.005179	0.00487	0.006541	0.006404	0.005975	0.006039
11	0.003119	0.002754	0.003731	0.005269	0.004557	0.004595	0.007105	0.006728
12	0.001694	0.001514	0.001194	0.001485	0.000461	0.000495	0.000577	0.000453
13	0.01168	0.008196	0.008342	0.010995	0.010222	0.008868	0.008723	0.009239
14	0.023642	0.02086	0.014508	0.015085	0.017662	0.015613	0.02028	0.017462
15	0.00476	0.005479	0.001672	0.001615	0.001488	0.001396	0.001173	0.000895
16	0.008262	0.007368	0.008955	0.009413	0.008525	0.008275	0.008291	0.008375
17	0.013725	0.01183	0.012619	0.015028	0.015703	0.015113	0.015491	0.013713
18	0.000953	0.000886	0.000656	0.000628	0.000798	0.000751	0.000774	0.000678
19	0.004057	0.003839	0.00386	0.00601	0.006038	0.006217	0.00619	0.005663
20	0.008366	0.007463	0.009702	0.010587	0.010677	0.009852	0.010127	0.010415
21	0.002906	0.002896	0.00364	0.004113	0.00446	0.004483	0.003988	0.003164
22	0.00412	0.004158	0.004796	0.004737	0.005277	0.005229	0.005007	0.005104
23	0.000837	0.000698	0.000416	0.000433	0.000364	0.000319	0.000387	0.000312
24	0.031938	0.028132	0.027227	0.025816	0.025063	0.020207	0.017307	0.022358
25	0.000368	0.00033	0.000285	0.000278	0.000213	0.000164	0.000185	0.000179
26	0.00123	0.001296	0.001527	0.001619	0.001619	0.0014	0.001272	0.001146
27	0.003394	0.003038	0.003575	0.003663	0.003442	0.003044	0.003027	0.002694
28	0.001524	0.001325	0.001203	0.000913	0.000781	0.000798	0.000803	0.000782
29	0.001056	0.001034	0.000868	0.00072	0.000771	0.000626	0.000516	0.000572
30	0.000947	0.000701	0.000604	0.000526	0.000449	0.00042	0.000349	0.000344
31	0.002689	0.002206	0.00221	0.001841	0.002175	0.002246	0.002656	0.002668
32	0.002312	0.002051	0.00265	0.003592	0.004362	0.004452	0.004934	0.005163
33	0.00332	0.003059	0.002557	0.002741	0.002438	0.002356	0.002117	0.002173
34	0.001719	0.001703	0.001544	0.001443	0.001288	0.001157	0.001159	0.001123
35	0.000452	0.000477	0.000684	0.000919	0.000844	0.000636	0.000666	0.000634
36	0.001556	0.001373	0.001205	0.00138	0.001532	0.001077	0.001075	0.001065
37	0.003397	0.00344	0.003665	0.003656	0.003402	0.003104	0.002805	0.003009
38	0.001977	0.001775	0.001864	0.002019	0.002033	0.002051	0.002202	0.002466
39	0.000089	9.16E-05	0.000113	0.000171	0.000157	0.000156	0.000156	0.000169
40	0.00138	0.001185	0.00089	0.000834	0.00076	0.000685	0.00069	0.00076
41	0.005388	0.005086	0.004038	0.004463	0.003483	0.003801	0.003972	0.003905
42	0.007659	0.007342	0.005454	0.007317	0.007175	0.005491	0.004724	0.004391
43	0.001834	0.001279	0.001026	0.001261	0.001066	0.001056	0.000787	0.000664
44	0.010056	0.009185	0.009803	0.010107	0.010909	0.013353	0.011399	0.012112
45	0.00299	0.002471	0.002546	0.004204	0.003905	0.002912	0.003139	0.002978
46	0.001504	0.000756	0.000916	0.001493	0.001256	0.001095	0.000877	0.001168
47	0.002351	0.002052	0.001632	0.001484	0.001323	0.001313	0.000841	0.000923

Sector	1998	1999	2000	2001	2002	2003	2004	2005
48	0.001355	0.001339	0.000961	0.001133	0.001116	0.001122	0.001165	0.001223
49	0.005916	0.005892	0.005368	0.005669	0.005221	0.004599	0.004634	0.004378
50	0.00169	0.001624	0.001525	0.002073	0.001886	0.001996	0.00217	0.002272
51	0.001081	0.000953	0.001024	0.000716	0.00052	0.000576	0.000772	0.001057
52	0.006658	0.006763	0.00683	0.007627	0.007979	0.007625	0.007761	0.007373
53	0.004567	0.004349	0.003695	0.003239	0.002979	0.002723	0.002699	0.002703
54	0.001644	0.001484	0.001531	0.0023	0.002187	0.002161	0.002323	0.002033
55	0.00868	0.007712	0.008661	0.009725	0.011287	0.012121	0.013785	0.015745
56	0.002317	0.001994	0.002303	0.002859	0.003252	0.002951	0.002378	0.002486
57	0.001857	0.002213	0.002062	0.002058	0.001902	0.00238	0.002165	0.001812
58	0.000583	0.000671	0.000629	0.000606	0.000858	0.000734	0.00099	0.001061
59	0.000203	0.00017	0.000163	0.000178	0.000218	0.000099	0.000104	0.000111
60	0.008565	0.007717	0.00958	0.010992	0.010362	0.010379	0.010579	0.009645
61	0.001917	0.001801	0.00152	0.00167	0.002281	0.002285	0.002199	0.002185
62	0.028309	0.044833	0.043023	0.037935	0.035848	0.035303	0.031352	0.02829
63	0.054471	0.05563	0.052499	0.056432	0.062512	0.06411	0.066947	0.0694
64	0.105328	0.12101	0.114764	0.105583	0.096123	0.087107	0.097893	0.099871
65	0.020044	0.019332	0.017464	0.014653	0.013692	0.011426	0.011196	0.012232
66	0.004595	0.004675	0.007079	0.006563	0.006419	0.007299	0.005862	0.00659
67	0.01433	0.014173	0.015246	0.02039	0.016915	0.013711	0.012678	0.007806
68	0.043856	0.040366	0.037717	0.037011	0.041759	0.048436	0.052042	0.046574
69	0.007073	0.00568	0.006541	0.007732	0.00644	0.004862	0.00383	0.00325
70	0.00413	0.003626	0.002947	0.001936	0.001892	0.001444	0.000914	0.000691
71	0.003996	0.005598	0.005167	0.00399	0.003281	0.003178	0.002942	0.001714
72	0.001977	0.002172	0.002677	0.003266	0.002881	0.003158	0.00349	0.003667
73	0.004607	0.005311	0.005	0.003284	0.003507	0.002692	0.002117	0.002403
74	0.026999	0.0353	0.036195	0.039412	0.032639	0.031619	0.033385	0.031565
75	0.017796	0.018779	0.01721	0.01752	0.025048	0.023382	0.021691	0.023459
76	0.074879	0.081868	0.083098	0.085691	0.083786	0.081566	0.078761	0.082649
77	0.001956	0.002319	0.004253	0.006281	0.010922	0.009998	0.008958	0.008308
78	0.004636	0.004594	0.003569	0.003314	0.002704	0.002753	0.002664	0.002207
79	0.007925	0.009158	0.00814	0.00585	0.005771	0.005712	0.005881	0.005877
80	0.008369	0.009527	0.010563	0.010214	0.019631	0.01525	0.016753	0.018432
81	0.038014	0.039603	0.041051	0.047076	0.040922	0.072336	0.074119	0.061347
82	0.027816	0.031667	0.031582	0.03212	0.03093	0.03562	0.037633	0.039546
83	0.019015	0.025821	0.020305	0.021615	0.01828	0.028942	0.028618	0.031263
84	0.021646	0.029229	0.028228	0.028621	0.026003	0.028703	0.028225	0.029345

Appendix 4 - Aggregated groups of sectors

4A. Aggregated 10 groups of sectors

Symbol	Label	Author's sectors included in the group
AG1	Agriculture, forestry, hunting, and fishing	1…5
AG2	Mining industries (without oil extraction)	6
AG3	Production and distribution of electric and thermal energy	62
AG4	Food industries, beverages, tobacco	7…15
AG5	Textiles, leather goods, pulp and paper, furniture	16...21, 60
AG6	Equipments, machinery, transport tools, other metal products	44…59
AG7	Other manufacturing industries	22…43, 61
AG8	Constructions	63
AG9	Transport, post, and telecommunications	67…74
AG10	Trade, commercial and public services	64…66, 75…84

The annual index of the gross value added (q)

Groups	AG1	AG2	AG3	AG4	AG5	AG6	AG7	AG8	AG9	AG10	Total
1990	1.36635	0.27997	0.69180	1.07807	0.79822	0.85301	0.83990	1.00577	0.78280	1.09849	0.97569
1991	0.87510	0.91446	2.79764	0.84379	0.91649	0.75795	0.89050	0.80498	0.91608	0.92415	0.88236
1992	0.85820	0.77710	0.95058	0.94931	0.85537	0.76253	0.84822	0.93001	0.93576	1.01690	0.91027
1993	1.13780	1.01830	1.40433	0.95357	0.93445	0.85949	1.01479	1.24840	1.03273	0.96405	1.03288
1994	1.03012	0.98357	1.08437	1.01194	1.08710	1.03806	1.01113	1.27499	1.00950	1.02864	1.04253
1995	1.05023	1.00351	1.02660	1.13646	1.06755	1.05073	1.02717	1.07153	1.02286	1.10840	1.06770
1996	0.96107	0.76924	0.88087	1.21969	1.20759	1.01225	1.02042	1.01095	1.06767	1.05466	1.03914
1997	0.99735	0.58238	0.81926	0.97017	0.94867	0.95196	0.90505	0.81571	0.91287	0.90633	0.92741
1998	0.88601	0.99025	0.95668	0.91259	0.92754	0.93696	0.95882	0.94454	0.89178	1.00951	0.94592
1999	1.03117	1.41071	0.88930	0.86517	1.06643	0.95270	0.89671	0.99094	0.99985	1.00172	0.98594
2000	0.81955	1.09288	0.85276	1.12908	1.14339	1.04510	1.06875	1.06379	1.05406	1.05587	1.02205
2001	1.27348	1.12625	0.84302	1.15326	1.03810	1.03584	1.00041	1.10464	1.03004	1.03005	1.06672
2002	0.93841	0.96465	1.09500	1.04146	1.07589	1.04885	1.06844	1.08259	1.06149	1.08140	1.05074
2003	1.05056	0.98690	0.97386	1.15606	1.03725	0.99452	0.98954	1.06837	1.08343	1.04456	1.04866
2004	1.20103	1.06082	0.97706	1.08480	1.06893	1.12420	1.08985	1.10479	1.01017	1.06751	1.08358
2005	0.82634	0.94450	0.96092	1.01080	0.98526	1.12387	1.02962	1.09911	1.07562	1.09618	1.03607

The annual deflator of the gross value added (p)

Groups	AG1	AG2	AG3	AG4	AG5	AG6	AG7	AG8	AG9	AG10	Total
1990	1.14993	1.50723	0.81917	1.10034	1.11961	1.09651	1.24068	1.04072	1.16246	1.07184	1.12827
1991	2.38154	2.43755	6.05855	2.64013	2.35743	2.28690	2.93539	2.59112	3.44393	4.10012	2.91400
1992	3.18512	3.92711	4.76094	3.15729	2.70156	3.09399	3.27264	3.25954	3.70029	3.08253	3.22312
1993	3.19796	2.93856	2.12490	3.69322	3.20117	3.12089	2.86515	2.86594	3.78176	2.86628	3.06137
1994	2.29166	2.33527	2.58654	2.61967	2.52795	2.72328	2.58873	2.45290	2.12958	2.23770	2.37536
1995	1.37707	0.94161	1.28297	1.28631	1.24359	1.24416	1.22539	1.37217	1.26220	1.48700	1.34259
1996	1.53681	1.01769	1.08340	1.46132	1.38030	1.58360	1.50524	1.47638	1.65595	1.38090	1.45830
1997	2.18709	4.98444	3.13650	2.46567	2.04775	1.96810	2.34098	2.30168	2.52312	2.68732	2.42066
1998	1.32441	2.02762	1.53847	1.34602	1.35651	1.40642	1.47357	1.51227	1.70369	1.74360	1.53765
1999	1.29552	1.43796	2.25775	1.31052	1.31826	1.35110	1.28826	1.47675	1.58524	1.52806	1.45767
2000	1.49870	1.54208	1.51454	1.56340	1.55084	1.48847	1.50213	1.35051	1.41275	1.37912	1.43965
2001	1.39136	1.40576	1.45743	1.37466	1.44613	1.52021	1.36020	1.43788	1.41293	1.33290	1.38142
2002	1.18292	1.37702	1.45808	1.09728	1.25109	1.28426	1.27772	1.30561	1.18529	1.24005	1.23144
2003	1.25114	0.99723	1.16328	1.05875	1.16783	1.24788	1.06563	1.22282	1.21000	1.28548	1.21894
2004	1.12930	1.15842	1.10538	1.12346	1.14781	1.18432	1.12476	1.15613	1.10980	1.15721	1.14314
2005	0.94823	1.09983	1.13483	1.14867	1.07173	1.13659	1.21117	1.15385	1.06541	1.15903	1.11396

Relative output index (rq)

Groups	AG1	AG2	AG3	AG4	AG5	AG6	AG7	AG8	AG9	AG10
1990	1.40039	0.28695	0.70903	1.10493	0.81811	0.87426	0.86083	1.03083	0.80230	1.12586
1991	0.99177	1.03638	3.17065	0.95629	1.03868	0.85901	1.00923	0.91231	1.03822	1.04737
1992	0.94280	0.85370	1.04429	1.04289	0.93969	0.83770	0.93183	1.02169	1.02800	1.11715
1993	1.10157	0.98588	1.35962	0.92321	0.90470	0.83213	0.98248	1.20865	0.99985	0.93336
1994	0.98809	0.94344	1.04013	0.97066	1.04276	0.99571	0.96988	1.22297	0.96831	0.98667
1995	0.98364	0.93989	0.96151	1.06441	0.99986	0.98411	0.96204	1.00359	0.95801	1.03813
1996	0.92487	0.74027	0.84769	1.17375	1.16211	0.97412	0.98198	0.97287	1.02746	1.01493
1997	1.07542	0.62797	0.88339	1.04611	1.02293	1.02647	0.97589	0.87955	0.98432	0.97727
1998	0.93666	1.04687	1.01138	0.96476	0.98057	0.99053	1.01364	0.99854	0.94276	1.06722
1999	1.04588	1.43083	0.90198	0.87751	1.08164	0.96629	0.90950	1.00507	1.01411	1.01600
2000	0.80187	1.06931	0.83437	1.10472	1.11872	1.02255	1.04570	1.04084	1.03132	1.03309
2001	1.19383	1.05581	0.79029	1.08113	0.97317	0.97106	0.93784	1.03555	0.96562	0.96562
2002	0.89309	0.91807	1.04212	0.99117	1.02394	0.99821	1.01685	1.03031	1.01024	1.02918
2003	1.00181	0.94111	0.92867	1.10243	0.98913	0.94838	0.94362	1.01880	1.03316	0.99609
2004	1.10839	0.97900	0.90169	1.00113	0.98648	1.03748	1.00579	1.01958	0.93225	0.98517
2005	0.79758	0.91162	0.92747	0.97561	0.95096	1.08475	0.99378	1.06085	1.03818	1.05802

Relative price index (rp)

Groups	AG1	AG2	AG3	AG4	AG5	AG6	AG7	AG8	AG9	AG10
1990	1.01919	1.33588	0.72603	0.97524	0.99232	0.97185	1.09963	0.92240	1.03030	0.94998
1991	0.81727	0.83649	2.07912	0.90602	0.80900	0.78480	1.00734	0.88920	1.18185	1.40704
1992	0.98821	1.21842	1.47712	0.97958	0.83818	0.95994	1.01536	1.01130	1.14804	0.95638
1993	1.04462	0.95988	0.69410	1.20640	1.04567	1.01944	0.93591	0.93617	1.23532	0.93628
1994	0.96476	0.98313	1.08891	1.10286	1.06424	1.14647	1.08983	1.03265	0.89653	0.94205
1995	1.02568	0.70134	0.95559	0.95808	0.92626	0.92668	0.91270	1.02203	0.94012	1.10755
1996	1.05383	0.69786	0.74292	1.00207	0.94651	1.08592	1.03219	1.01240	1.13554	0.94692
1997	0.90351	2.05912	1.29572	1.01859	0.84595	0.81304	0.96708	0.95085	1.04233	1.11016
1998	0.86132	1.31865	1.00054	0.87538	0.88220	0.91466	0.95833	0.98350	1.10799	1.13394
1999	0.88876	0.98647	1.54888	0.89905	0.90436	0.92689	0.88378	1.01309	1.08752	1.04829
2000	1.04102	1.07114	1.05202	1.08596	1.07724	1.03391	1.04340	0.93808	0.98131	0.95795
2001	1.00720	1.01763	1.05502	0.99511	1.04685	1.10047	0.98464	1.04088	1.02282	0.96488
2002	0.96060	1.11822	1.18405	0.89106	1.01596	1.04289	1.03758	1.06023	0.96252	1.00699
2003	1.02642	0.81811	0.95433	0.86858	0.95807	1.02374	0.87422	1.00318	0.99266	1.05459
2004	0.98789	1.01337	0.96697	0.98278	1.00409	1.03603	0.98392	1.01136	0.97084	1.01231
2005	0.85123	0.98732	1.01874	1.03116	0.96209	1.02032	1.08727	1.03582	0.95642	1.04046

Weights of groups (w)

Groups	AG1	AG2	AG3	AG4	AG5	AG6	AG7	AG8	AG9	AG10	Total
1989	0.15744	0.03148	0.01415	0.06960	0.11517	0.17043	0.10375	0.05993	0.07356	0.20448	1
1990	0.23158	0.01627	0.00589	0.07488	0.09360	0.14497	0.09464	0.05698	0.06263	0.21856	1
1991	0.19681	0.01709	0.03245	0.06398	0.07329	0.09514	0.11297	0.04547	0.07125	0.29156	1
1992	0.18526	0.01773	0.04887	0.06455	0.05805	0.07609	0.10767	0.04681	0.08360	0.31137	1
1993	0.21649	0.01693	0.04048	0.07257	0.05522	0.06517	0.09869	0.05353	0.10505	0.27585	1
1994	0.20643	0.01589	0.04360	0.07677	0.06213	0.07434	0.10308	0.06781	0.09258	0.25736	1
1995	0.20748	0.01060	0.03984	0.07883	0.05722	0.06771	0.09057	0.06914	0.08312	0.29548	1
1996	0.20129	0.00378	0.02536	0.09231	0.06281	0.07184	0.09156	0.06791	0.09651	0.28665	1
1997	0.19452	0.00659	0.02887	0.09798	0.05418	0.05964	0.08636	0.05652	0.09852	0.31680	1
1998	0.15807	0.00791	0.02903	0.08227	0.04658	0.05370	0.08350	0.05507	0.10350	0.38038	1
1999	0.14892	0.01096	0.04092	0.06433	0.04553	0.04805	0.06705	0.05600	0.11368	0.40455	1
2000	0.12365	0.01255	0.03619	0.07718	0.05459	0.05074	0.07362	0.05457	0.11517	0.40174	1
2001	0.14722	0.01342	0.03017	0.08300	0.05549	0.05428	0.06817	0.05876	0.11318	0.37631	1
2002	0.12606	0.01401	0.03705	0.07328	0.05757	0.05651	0.07191	0.06401	0.11009	0.38950	1
2003	0.13027	0.01110	0.03207	0.07047	0.05461	0.05461	0.05930	0.06547	0.11348	0.40863	1
2004	0.14286	0.01099	0.02794	0.06911	0.05402	0.05861	0.05910	0.06741	0.10275	0.40722	1
2005	0.09678	0.00988	0.02626	0.06904	0.04902	0.06435	0.06437	0.07358	0.10176	0.44495	1

4B. Classical areas

Symbol	Label	Included above defined groups
WPRIM	Primary	WAG1...WAG3
WSEC	Secondary	WAG4…WAG8
WTER	Tertiary	WAG9. WAG10

Weights of classical areas (w)

	WPRIM	WPSEC	WPTER	Total
1989	0.20307	0.51889	0.27804	1
1990	0.25374	0.46506	0.28119	1
1991	0.24636	0.39084	0.36281	1
1992	0.25187	0.35317	0.39496	1
1993	0.27391	0.34519	0.38090	1
1994	0.26592	0.38413	0.34994	1
1995	0.25792	0.36348	0.37860	1
1996	0.23042	0.38641	0.38317	1
1997	0.22999	0.35468	0.41533	1
1998	0.19501	0.32111	0.48387	1
1999	0.20080	0.28096	0.51824	1
2000	0.17239	0.31070	0.51691	1
2001	0.19082	0.31969	0.48949	1
2002	0.17712	0.32329	0.49959	1
2003	0.17343	0.30446	0.52211	1
2004	0.18179	0.30824	0.50997	1
2005	0.13293	0.32036	0.54671	1

Appendix 5 - Statistical analysis

5A. Correlation coefficients (Pearson, Kendall, Spearman)

	Pearson coefficient	Kendall's tau	Spearman's rho
wrp1-wrq1	0.72815	0.55000	0.73235
wrp2-wrq2	0.80484	0.55000	0.71765
wrp3-wrq3	0.92325	0.86667	0.95588
wrp4-wrq4	0.73266	0.58333	0.74706
wrp5-wrq5	0.67423	0.45000	0.62647
wrp6-wrq6	0.15745	0.46667	0.59412
wrp7-wrq7	0.62824	0.30000	0.37647
wrp8-wrq8	0.83703	0.65000	0.80882
wrp9-wrq9	0.64885	0.65000	0.77647
wrp10-wrq10	0.85512	0.63333	0.82353
wrp11-wrq11	0.83849	0.76667	0.90000
wrp12-wrq12	0.87909	0.70000	0.87647
wrp13-wrq13	0.69380	0.46667	0.67059
wrp14-wrq14	0.69999	0.18333	0.32647
wrp15-wrq15	0.71106	0.68333	0.81765
wrp16-wrq16	0.93371	0.66667	0.82647
wrp17-wrq17	0.33534	0.36667	0.43824
wrp18-wrq18	0.66081	0.41667	0.68235
wrp19-wrq19	0.85042	0.65000	0.77941
wrp20-wrq20	-0.19963	0.00000	0.00588
wrp21-wrq21	-0.18183	0.46667	0.49706
wrp22-wrq22	0.82003	0.51667	0.71765
wrp23-wrq23	0.79942	0.76667	0.89412
wrp24-wrq24	0.67842	0.65000	0.83824
wrp25-wrq25	0.61546	0.66667	0.84118
wrp26-wrq26	0.62651	0.61667	0.76471
wrp27-wrq27	0.86156	0.71667	0.86765
wrp28-wrq28	0.61869	0.60000	0.75882
wrp29-wrq29	0.90947	0.88333	0.97059
wrp30-wrq30	0.88997	0.85000	0.92647
wrp31-wrq31	0.58910	0.53333	0.67941
wrp32-wrq32	0.98903	0.86667	0.96471
wrp33-wrq33	0.44890	0.36667	0.50294
wrp34-wrq34	0.67133	0.58333	0.71765
wrp35-wrq35	0.84359	0.66667	0.81471
wrp36-wrq36	0.93183	0.78333	0.93235
wrp37-wrq37	0.30456	0.15000	0.19706
wrp38-wrq38	0.96295	0.80000	0.93235
wrp39-wrq39	0.91843	0.75000	0.90000
wrp40-wrq40	0.68840	0.61667	0.78235
wrp41-wrq41	0.54101	0.21667	0.35882
wrp42-wrq42	0.75725	0.56667	0.77059

	Pearson coefficient	Kendall's tau	Spearman's rho
wrp43-wrq43	0.94398	0.81667	0.93235
wrp44-wrq44	0.86692	0.46667	0.60294
wrp45-wrq45	0.71146	0.38333	0.52353
wrp46-wrq46	0.90092	0.66667	0.83824
wrp47-wrq47	0.80095	0.86667	0.96471
wrp48-wrq48	0.97672	0.55000	0.69706
wrp49-wrq49	0.94800	0.80000	0.92941
wrp50-wrq50	0.30731	0.36667	0.53235
wrp51-wrq51	0.84102	0.70000	0.85000
wrp52-wrq52	0.67324	0.46667	0.61765
wrp53-wrq53	0.85386	0.75000	0.87353
wrp54-wrq54	0.88022	0.76667	0.89118
wrp55-wrq55	0.76981	0.43333	0.58235
wrp56-wrq56	0.71886	0.36667	0.47941
wrp57-wrq57	0.85031	0.45000	0.61765
wrp58-wrq58	0.86829	0.76667	0.90588
wrp59-wrq59	0.93413	0.83333	0.95000
wrp60-wrq60	0.24304	0.33333	0.52059
wrp61-wrq61	0.75345	0.26667	0.34412
wrp62-wrq62	0.52603	0.43333	0.58824
wrp63-wrq63	0.82142	0.65000	0.81471
wrp64-wrq64	0.24320	0.50000	0.55882
wrp65-wrq65	0.94637	0.80000	0.91765
wrp66-wrq66	0.60361	0.48333	0.64118
wrp67-wrq67	0.79515	0.66667	0.84706
wrp68-wrq68	0.83055	0.63333	0.81765
wrp69-wrq69	0.64547	0.51667	0.68824
wrp70-wrq70	0.54925	0.48333	0.60588
wrp71-wrq71	0.85331	0.75000	0.89412
wrp72-wrq72	0.95926	0.83333	0.94412
wrp73-wrq73	0.80396	0.63333	0.75588
wrp74-wrq74	0.96404	0.75000	0.90294
wrp75-wrq75	0.95264	0.76667	0.90294
wrp76-wrq76	0.92089	0.70000	0.85882
wrp77-wrq77	0.95925	0.60000	0.75882
wrp78-wrq78	0.84318	0.73333	0.83235
wrp79-wrq79	0.49603	0.55000	0.66471
wrp80-wrq80	0.92532	0.80000	0.92353
wrp81-wrq81	0.77654	0.53333	0.72647
wrp82-wrq82	0.43739	0.25000	0.33824
wrp83-wrq83	0.42591	0.18333	0.28529
wrp84-wrq84	0.92132	0.65000	0.83235

5B. The Granger causality test (G.C.)

wrq does not G.C. wrp		wrp does not G.C. wrq	
F-Statistic	Prob.	F-Statistic	Prob.
1.60689	0.25309	11.33287	0.00348
0.17079	0.84567	13.32445	0.00204
1.79466	0.22084	6.49114	0.01798
0.54827	0.59609	9.40059	0.00625
3.34380	0.08205	5.72367	0.02490
1.44812	0.28494	40.72717	0.00003
4.93799	0.03569	12.16234	0.00276
4.71379	0.03976	3.64789	0.06914
5.80272	0.02405	12.65117	0.00243
2.84345	0.11038	1.36468	0.30364
7.11210	0.01404	1.83526	0.21454
4.52373	0.04367	6.08705	0.02128
1.41489	0.29221	0.55876	0.59055
4.47316	0.04479	7.06359	0.01431
7.40711	0.01254	2.26990	0.15916
1.32156	0.31389	5.27193	0.03052
2.90089	0.10658	4.63381	0.04135
0.23815	0.79290	4.49137	0.04439
5.16401	0.03208	2.70993	0.11989
5.59521	0.02636	1.78844	0.22183
4.23412	0.05058	15.18735	0.00131
0.16393	0.85128	11.48044	0.00334
3.90307	0.06018	6.39576	0.01870
0.51883	0.61199	0.49422	0.62568
14.20025	0.00164	5.63516	0.02590
5.11707	0.03279	24.49771	0.00023
3.39184	0.07983	23.37247	0.00027
2.56883	0.13104	6.35142	0.01904
11.79943	0.00305	32.22619	0.00008
5.74344	0.02469	187.04439	0.00000
8.37711	0.00882	20.93821	0.00041
32.08742	0.00008	6.10801	0.02109
13.11908	0.00215	5.56794	0.02668
17.08791	0.00086	6.85700	0.01552
17.34459	0.00082	1.08140	0.37941
6.73130	0.01631	2.98856	0.10108
10.98594	0.00384	4.15913	0.05258
3.00612	0.10002	205.32877	0.00000
5.36248	0.02928	4.01594	0.05668
1.90133	0.20476	2.13086	0.17474
1.23712	0.33522	5.83447	0.02372
4.31604	0.04850	2.47926	0.13878
4.07070	0.05507	22.56143	0.00031
0.84278	0.46185	5.43303	0.02835

wrq does not G.C. wrp		wrp does not G.C. wrq	
F-Statistic	Prob.	F-Statistic	Prob.
0.85683	0.45643	1.77023	0.22474
8.13381	0.00961	13.47721	0.00196
47.06994	0.00002	0.17073	0.84572
0.86523	0.45322	2.96683	0.10241
0.21523	0.81039	22.99755	0.00029
1.34639	0.30794	1.59389	0.25552
4.58894	0.04228	4.32280	0.04833
2.91688	0.10555	5.21593	0.03132
1.65493	0.24432	7.88170	0.01052
15.04424	0.00135	0.83677	0.46420
3.09232	0.09501	20.18445	0.00047
6.38767	0.01876	0.97930	0.41228
1.50755	0.27247	1.23500	0.33578
4.70905	0.03986	14.13992	0.00167
40.71037	0.00003	43.47583	0.00002
0.16064	0.85399	9.80732	0.00549
0.49463	0.62545	0.84149	0.46235
0.83861	0.46348	32.41054	0.00008
12.47112	0.00255	1.69031	0.23809
6.58420	0.01731	15.45322	0.00123
30.57579	0.00010	0.50724	0.61839
25.35975	0.00020	35.51232	0.00005
2.78554	0.11439	6.06132	0.02151
1.43023	0.28882	18.59659	0.00064
0.76090	0.49509	20.78245	0.00042
3.09899	0.09464	6.90375	0.01523
2.99464	0.10071	3.59522	0.07119
1.55381	0.26322	2.61752	0.12705
1.51757	0.27043	4.65967	0.04083
1.55007	0.26396	26.63669	0.00017
7.86611	0.01058	3.67649	0.06806
0.72861	0.50900	61.35885	0.00001
10.99390	0.00383	2.05268	0.18432
0.83769	0.46384	29.17487	0.00012
2.39371	0.14670	0.72621	0.51005
6.51245	0.01782	0.51779	0.61256
0.39812	0.68285	16.10724	0.00106
0.26614	0.77216	20.47467	0.00045
1.69264	0.23769	17.98405	0.00072
0.75913	0.49584	20.11893	0.00048

Appendix 6 - Direct (DOLS) and reverse (ROLS) OLS

6A. System SYS1a09 (DOLS): wrpi=c(i)+c(1i)*wrqi

Estimation Method: Least Squares

Sample: 1990 2005

Included observations: 16

Total system (balanced) observations 1344

	Coefficient	Std. Error	t-Statistic	Prob.
c(1)	0.01965	0.02522	0.77905	0.43611
c(101)	0.79674	0.20044	3.97493	0.00007
c(2)	0.00969	0.00564	1.71793	0.08607
c(102)	0.69389	0.13675	5.07417	0.00000
c(3)	0.00305	0.00066	4.60027	0.00000
c(103)	0.50341	0.05599	8.99140	0.00000
c(4)	0.00009	0.00042	0.20292	0.83923
c(104)	1.00161	0.24867	4.02786	0.00006
c(5)	0.00099	0.00072	1.38025	0.16777
c(105)	0.71663	0.20979	3.41597	0.00066
c(6)	0.01023	0.00681	1.50196	0.13338
c(106)	0.32726	0.54857	0.59656	0.55091
c(7)	0.00890	0.00415	2.14378	0.03226
c(107)	0.55141	0.18250	3.02136	0.00257
c(8)	0.00070	0.00079	0.89549	0.37071
c(108)	0.77289	0.13503	5.72390	0.00000
c(9)	0.00072	0.00064	1.12758	0.25973
c(109)	0.74510	0.23353	3.19063	0.00146
c(10)	0.00173	0.00068	2.54887	0.01093
c(110)	0.67974	0.11014	6.17166	0.00000
c(11)	0.00080	0.00054	1.49158	0.13608
c(111)	0.69462	0.12065	5.75738	0.00000
c(12)	0.00025	0.00043	0.57464	0.56564
c(112)	1.01569	0.14719	6.90072	0.00000
c(13)	0.00163	0.00269	0.60445	0.54566
c(113)	0.80691	0.22385	3.60464	0.00033
c(14)	0.00845	0.00296	2.85386	0.00440
c(114)	0.52073	0.14199	3.66741	0.00026
c(15)	0.00146	0.00065	2.25519	0.02431
c(115)	0.62692	0.16568	3.78382	0.00016
c(16)	0.00169	0.00157	1.07561	0.28232
c(116)	0.80474	0.08247	9.75824	0.00000
c(17)	0.00955	0.00377	2.53392	0.01141
c(117)	0.31429	0.23598	1.33186	0.18316
c(18)	0.00048	0.00016	3.07383	0.00216
c(118)	0.47300	0.14358	3.29428	0.00102
c(19)	-0.00013	0.00108	-0.12266	0.90240
c(119)	1.04206	0.17229	6.04825	0.00000

	Coefficient	Std. Error	t-Statistic	Prob.
c(20)	0.00909	0.00238	3.81674	0.00014
c(120)	0.04567	0.23370	0.19543	0.84509
c(520)	0.00331	0.00126	2.63799	0.00845
c(21)	0.00102	0.00046	2.22633	0.02618
c(121)	0.67235	0.11470	5.86201	0.00000
c(521)	0.00791	0.00036	21.88149	0.00000
c(22)	0.00049	0.00067	0.72526	0.46844
c(122)	0.78821	0.14703	5.36100	0.00000
c(23)	0.00032	0.00024	1.32030	0.18699
c(123)	0.65664	0.13188	4.97891	0.00000
c(24)	0.01224	0.00409	2.98983	0.00285
c(124)	0.53396	0.15454	3.45511	0.00057
c(25)	0.00037	0.00030	1.21098	0.22615
c(125)	0.77710	0.26597	2.92172	0.00355
c(26)	0.00037	0.00065	0.56594	0.57154
c(126)	0.98497	0.32749	3.00764	0.00269
c(27)	0.00015	0.00061	0.24874	0.80361
c(127)	1.03850	0.16354	6.35012	0.00000
c(28)	0.00059	0.00038	1.56064	0.11888
c(128)	0.62163	0.21097	2.94659	0.00328
c(29)	0.00041	0.00022	1.85159	0.06434
c(129)	0.72543	0.08863	8.18457	0.00000
c(30)	0.00010	0.00018	0.55901	0.57626
c(130)	0.95756	0.13113	7.30230	0.00000
c(31)	0.00046	0.00103	0.44505	0.65637
c(131)	0.84882	0.31117	2.72779	0.00647
c(32)	-0.00074	0.00024	-3.05461	0.00230
c(132)	1.14682	0.04578	25.04932	0.00000
c(33)	0.00148	0.00074	1.98856	0.04698
c(133)	0.48103	0.25591	1.87968	0.06040
c(34)	0.00063	0.00022	2.82480	0.00481
c(134)	0.52765	0.15569	3.38914	0.00072
c(35)	0.00013	0.00007	1.79867	0.07233
c(135)	0.79445	0.13516	5.87792	0.00000
c(36)	0.00004	0.00013	0.31514	0.75271
c(136)	0.97954	0.10195	9.60758	0.00000
c(37)	0.00267	0.00061	4.36123	0.00001
c(137)	0.22343	0.18675	1.19641	0.23178
c(38)	-0.00050	0.00052	-0.95525	0.33965
c(138)	1.30433	0.09763	13.35992	0.00000
c(39)	0.00004	0.00006	0.55749	0.57730
c(139)	0.94130	0.10835	8.68725	0.00000
c(40)	0.00029	0.00025	1.14858	0.25096
c(140)	0.80996	0.22808	3.55116	0.00040
c(41)	0.00304	0.00077	3.93335	0.00009
c(141)	0.37786	0.15699	2.40693	0.01624

	Coefficient	Std. Error	t-Statistic	Prob.
c(42)	0.00106	0.00180	0.58917	0.55586
c(142)	0.95314	0.21971	4.33810	0.00002
c(43)	0.00040	0.00027	1.50345	0.13299
c(143)	0.84046	0.07852	10.70321	0.00000
c(44)	-0.00047	0.00229	-0.20661	0.83635
c(144)	1.07116	0.16460	6.50756	0.00000
c(45)	0.00109	0.00075	1.45432	0.14612
c(145)	0.74591	0.19690	3.78819	0.00016
c(46)	0.00052	0.00068	0.76604	0.44381
c(146)	0.93833	0.12080	7.76739	0.00000
c(47)	0.00082	0.00056	1.45294	0.14651
c(147)	0.78808	0.15745	5.00533	0.00000
c(48)	0.00029	0.00013	2.26257	0.02384
c(148)	0.93084	0.05464	17.03660	0.00000
c(49)	0.00180	0.00077	2.33371	0.01978
c(149)	0.78118	0.07009	11.14480	0.00000
c(50)	0.00137	0.00075	1.82787	0.06782
c(150)	0.41424	0.34282	1.20831	0.22717
c(51)	-0.00045	0.00032	-1.39606	0.16296
c(151)	1.48652	0.25557	5.81649	0.00000
c(52)	0.00273	0.00140	1.95163	0.05122
c(152)	0.60331	0.17709	3.40674	0.00068
c(53)	0.00041	0.00077	0.53416	0.59333
c(153)	0.87046	0.14182	6.13794	0.00000
c(54)	-0.00016	0.00087	-0.18131	0.85616
c(154)	1.26587	0.18240	6.94002	0.00000
c(55)	0.00376	0.00145	2.58982	0.00972
c(155)	0.60581	0.13424	4.51275	0.00001
c(56)	0.00061	0.00057	1.06284	0.28807
c(156)	0.81760	0.21131	3.86921	0.00012
c(57)	-0.00070	0.00058	-1.20962	0.22667
c(157)	1.51773	0.25106	6.04523	0.00000
c(58)	-0.00006	0.00019	-0.30695	0.75894
c(158)	1.17176	0.17891	6.54944	0.00000
c(59)	0.00013	0.00008	1.60446	0.10888
c(159)	0.75368	0.07697	9.79236	0.00000
c(60)	0.00447	0.00551	0.81112	0.41746
c(160)	0.52450	0.55948	0.93748	0.34870
c(61)	0.00115	0.00034	3.37729	0.00076
c(161)	0.48131	0.11226	4.28760	0.00002
c(62)	0.01913	0.00665	2.87600	0.00410
c(162)	0.45416	0.19624	2.31427	0.02082
c(63)	-0.00650	0.01213	-0.53553	0.59238
c(163)	1.07498	0.19948	5.38892	0.00000
c(64)	0.07617	0.02471	3.08221	0.00210
c(164)	0.23131	0.24656	0.93812	0.34837

	Coefficient	Std. Error	t-Statistic	Prob.
c(65)	0.00014	0.00113	0.12175	0.90312
c(165)	0.97370	0.08884	10.96008	0.00000
c(66)	0.00123	0.00285	0.43084	0.66666
c(166)	0.99311	0.35058	2.83276	0.00469
c(67)	-0.00197	0.00383	-0.51516	0.60654
c(167)	1.26717	0.25828	4.90622	0.00000
c(68)	0.01303	0.00531	2.45545	0.01421
c(168)	0.69757	0.12502	5.57974	0.00000
c(69)	0.00229	0.00115	1.98247	0.04766
c(169)	0.67079	0.21213	3.16208	0.00161
c(70)	0.00198	0.00099	1.99947	0.04579
c(170)	0.75349	0.30639	2.45927	0.01407
c(71)	0.00023	0.00059	0.38651	0.69919
c(171)	1.14985	0.18778	6.12331	0.00000
c(72)	0.00017	0.00017	0.99753	0.31871
c(172)	0.85663	0.06743	12.70355	0.00000
c(73)	-0.00056	0.00071	-0.78662	0.43167
c(173)	1.16088	0.22950	5.05832	0.00000
c(74)	-0.00016	0.00184	-0.08703	0.93067
c(174)	0.98758	0.07276	13.57236	0.00000
c(75)	-0.00387	0.00300	-1.29160	0.19675
c(175)	1.06626	0.09097	11.72101	0.00000
c(76)	0.00444	0.00628	0.70773	0.47926
c(176)	0.93102	0.10533	8.83909	0.00000
c(77)	-0.00007	0.00042	-0.16023	0.87272
c(177)	0.91220	0.07181	12.70308	0.00000
c(78)	0.00118	0.00061	1.93046	0.05379
c(178)	0.76619	0.13057	5.86821	0.00000
c(79)	0.00490	0.00110	4.46227	0.00001
c(179)	0.29994	0.14033	2.13748	0.03276
c(80)	0.00007	0.00113	0.06037	0.95187
c(180)	0.90987	0.09965	9.13076	0.00000
c(81)	-0.00863	0.01117	-0.77253	0.43996
c(181)	1.28995	0.27972	4.61155	0.00000
c(82)	0.01307	0.00892	1.46538	0.14309
c(182)	0.54478	0.29935	1.81987	0.06903
c(83)	0.00800	0.00777	1.02947	0.30347
c(183)	0.62797	0.35653	1.76136	0.07844
c(84)	0.00138	0.00229	0.60328	0.54644
c(184)	0.92079	0.10385	8.86615	0.00000
Determinant residual covariance		0		23+2

6B. System SYS1b09 (ROLS): wrqi=c(2i)+c(3i)*wrpi

Estimation Method: Least Squares

Sample: 1990 2005

Included observations: 16

Total system (balanced) observations 1344

	Coefficient	Std. Error	t-Statistic	Prob.
c(201)	0.04494	0.02025	2.21870	0.02670
c(301)	0.66546	0.16741	3.97493	7.47E-05
c(202)	0.00410	0.00711	0.57663	0.56430
c(302)	0.93354	0.18398	5.07417	4.52E-07
c(203)	-0.00384	0.00163	-2.35645	0.01861
c(303)	1.69324	0.18832	8.99140	9.55E-19
c(204)	0.00072	0.00024	3.01436	0.00263
c(304)	0.53593	0.13305	4.02786	5.99E-05
c(205)	0.00121	0.00064	1.88923	0.05911
c(305)	0.63434	0.18570	3.41597	0.00066
c(206)	0.01073	0.00206	5.21210	2.20E-07
c(306)	0.07575	0.12698	0.59656	0.55091
c(207)	0.00712	0.00511	1.39508	0.16325
c(307)	0.71578	0.23691	3.02136	0.00257
c(208)	0.00098	0.00084	1.17735	0.23930
c(308)	0.90649	0.15837	5.72390	1.32E-08
c(209)	0.00108	0.00050	2.15098	0.03168
c(309)	0.56504	0.17709	3.19063	0.00146
c(210)	-0.00024	0.00103	-0.23648	0.81311
c(310)	1.07575	0.17430	6.17166	9.29E-10
c(211)	0.00031	0.00069	0.45059	0.65237
c(311)	1.01215	0.17580	5.75738	1.09E-08
c(212)	0.00035	0.00037	0.94951	0.34256
c(312)	0.76086	0.11026	6.90072	8.44E-12
c(213)	0.00517	0.00189	2.73712	0.00629
c(313)	0.59654	0.16549	3.60464	0.00033
c(214)	0.00232	0.00496	0.46774	0.64006
c(314)	0.94096	0.25657	3.66741	0.00026
c(215)	0.00030	0.00085	0.35591	0.72197
c(315)	0.80649	0.21314	3.78382	0.00016
c(216)	0.00016	0.00190	0.08333	0.93360
c(316)	1.08336	0.11102	9.75824	1.10E-21
c(217)	0.01047	0.00397	2.63510	0.00852
c(317)	0.35781	0.26865	1.33186	0.18316
c(218)	0.00014	0.00028	0.50076	0.61663
c(318)	0.92319	0.28024	3.29428	0.00102
c(219)	0.00176	0.00075	2.35709	0.01858
c(319)	0.69403	0.11475	6.04825	1.97E-09
c(220)	0.00950	0.00315	3.01352	0.00264

	Coefficient	Std. Error	t-Statistic	Prob.
c(320)	0.06414	0.32819	0.19543	0.84509
c(620)	-0.00231	0.00173	-1.33621	0.18174
c(221)	-0.00002	0.00068	-0.03174	0.97468
c(321)	1.07908	0.18408	5.86201	5.94E-09
c(621)	-0.00892	0.00135	-6.60132	6.16E-11
c(222)	0.00102	0.00066	1.54860	0.12175
c(322)	0.85312	0.15913	5.36100	9.96E-08
c(223)	0.00017	0.00031	0.53240	0.59455
c(323)	0.97325	0.19547	4.97891	7.35E-07
c(224)	0.00326	0.00660	0.49343	0.62180
c(324)	0.86195	0.24947	3.45511	0.00057
c(225)	0.00035	0.00024	1.47292	0.14104
c(325)	0.48743	0.16683	2.92172	0.00355
c(226)	0.00099	0.00033	3.03529	0.00246
c(326)	0.39851	0.13250	3.00764	0.00269
c(227)	0.00082	0.00046	1.80166	0.07186
c(327)	0.71477	0.11256	6.35012	3.07E-10
c(228)	0.00065	0.00037	1.76007	0.07866
c(328)	0.61576	0.20898	2.94659	0.00328
c(229)	-0.00014	0.00031	-0.44889	0.65359
c(329)	1.14020	0.13931	8.18457	7.05E-16
c(230)	0.00016	0.00016	0.98038	0.32710
c(330)	0.82716	0.11327	7.30230	5.21E-13
c(231)	0.00188	0.00051	3.65782	0.00027
c(331)	0.40885	0.14988	2.72779	0.00647
c(232)	0.00073	0.00018	3.97022	7.62E-05
c(332)	0.85294	0.03405	25.04932	2.74E-111
c(233)	0.00166	0.00065	2.56034	0.01058
c(333)	0.41892	0.22287	1.87968	0.06040
c(234)	0.00022	0.00035	0.61184	0.54076
c(334)	0.85414	0.25202	3.38914	0.00072
c(235)	0.00003	0.00009	0.33712	0.73609
c(335)	0.89576	0.15239	5.87792	5.41E-09
c(236)	0.00012	0.00012	0.99433	0.32027
c(336)	0.88644	0.09227	9.60758	4.33E-21
c(237)	0.00183	0.00119	1.54104	0.12358
c(337)	0.41516	0.34700	1.19641	0.23178
c(238)	0.00066	0.00036	1.86563	0.06234
c(338)	0.71092	0.05321	13.35992	5.30E-38
c(239)	0.00004	0.00006	0.61139	0.54106
c(339)	0.89612	0.10315	8.68725	1.23E-17
c(240)	0.00039	0.00020	1.96016	0.05021
c(340)	0.58509	0.16476	3.55116	0.00040
c(241)	0.00098	0.00158	0.61714	0.53726
c(341)	0.77460	0.32182	2.40693	0.01624
c(242)	0.00272	0.00125	2.17811	0.02960

	Coefficient	Std. Error	t-Statistic	Prob.
c(342)	0.60161	0.13868	4.33810	1.56E-05
c(243)	-0.00014	0.00032	-0.43768	0.66170
c(343)	1.06026	0.09906	10.70321	1.42E-25
c(244)	0.00362	0.00158	2.28782	0.02233
c(344)	0.70162	0.10782	6.50756	1.13E-10
c(245)	0.00106	0.00071	1.49611	0.13489
c(345)	0.67861	0.17914	3.78819	0.00016
c(246)	0.00026	0.00067	0.38441	0.70074
c(346)	0.86500	0.11136	7.76739	1.74E-14
c(247)	0.00038	0.00060	0.62989	0.52889
c(347)	0.81403	0.16263	5.00533	6.43E-07
c(248)	-0.00022	0.00015	-1.47779	0.13973
c(348)	1.02487	0.06016	17.03660	2.49E-58
c(249)	-0.00116	0.00106	-1.08998	0.27595
c(349)	1.15044	0.10323	11.14480	1.72E-27
c(250)	0.00163	0.00044	3.71560	0.00021
c(350)	0.22798	0.18868	1.20831	0.22717
c(251)	0.00052	0.00014	3.84284	0.00013
c(351)	0.47581	0.08180	5.81649	7.74E-09
c(252)	0.00214	0.00166	1.28778	0.19808
c(352)	0.75127	0.22052	3.40674	0.00068
c(253)	0.00101	0.00071	1.41387	0.15766
c(353)	0.83757	0.13646	6.13794	1.14E-09
c(254)	0.00093	0.00055	1.67296	0.09460
c(354)	0.61206	0.08819	6.94002	6.47E-12
c(255)	0.00057	0.00224	0.25641	0.79768
c(355)	0.97821	0.21677	4.51275	7.04E-06
c(256)	0.00089	0.00047	1.90264	0.05733
c(356)	0.63204	0.16335	3.86921	0.00012
c(257)	0.00093	0.00023	4.05596	5.32E-05
c(357)	0.47638	0.07880	6.04523	2.00E-09
c(258)	0.00026	0.00012	2.16696	0.03044
c(358)	0.64342	0.09824	6.54944	8.62E-11
c(259)	-0.00007	0.00011	-0.62247	0.53375
c(359)	1.15778	0.11823	9.79236	8.09E-22
c(260)	0.00873	0.00117	7.43775	1.97E-13
c(360)	0.11262	0.12013	0.93748	0.34870
c(261)	-0.00019	0.00071	-0.26587	0.79039
c(361)	1.17946	0.27509	4.28760	1.95E-05
c(262)	0.01131	0.00923	1.22490	0.22086
c(362)	0.60926	0.26326	2.31427	0.02082
c(263)	0.02375	0.00688	3.45106	0.00058
c(363)	0.62766	0.11647	5.38892	8.56E-08
c(264)	0.07248	0.02753	2.63268	0.00858
c(364)	0.25570	0.27256	0.93812	0.34837
c(265)	0.00105	0.00106	0.98731	0.32369

	Coefficient	Std. Error	t-Statistic	Prob.
c(365)	0.91981	0.08392	10.96008	1.11E-26
c(266)	0.00437	0.00130	3.36816	0.00078
c(366)	0.36687	0.12951	2.83276	0.00469
c(267)	0.00634	0.00174	3.65091	0.00027
c(367)	0.49896	0.10170	4.90622	1.06E-06
c(268)	0.00009	0.00756	0.01146	0.99085
c(368)	0.98887	0.17722	5.57974	2.99E-08
c(269)	0.00154	0.00119	1.30259	0.19297
c(369)	0.62112	0.19643	3.16208	0.00161
c(270)	0.00117	0.00076	1.54006	0.12382
c(370)	0.40037	0.16280	2.45927	0.01407
c(271)	0.00066	0.00040	1.63296	0.10275
c(371)	0.63324	0.10341	6.12331	1.25E-09
c(272)	-7.04E-07	0.00020	-0.00354	0.99718
c(372)	1.07418	0.08456	12.70355	9.74E-35
c(273)	0.00137	0.00035	3.97082	7.60E-05
c(373)	0.55677	0.11007	5.05832	4.90E-07
c(274)	0.00173	0.00173	0.99739	0.31878
c(374)	0.94105	0.06934	13.57236	4.39E-39
c(275)	0.00615	0.00230	2.67024	0.00768
c(375)	0.85112	0.07262	11.72101	4.38E-30
c(276)	0.00340	0.00625	0.54452	0.58618
c(376)	0.91087	0.10305	8.83909	3.46E-18
c(277)	0.00044	0.00043	1.02916	0.30362
c(377)	1.00873	0.07941	12.70308	9.79E-35
c(278)	0.00016	0.00075	0.20765	0.83554
c(378)	0.92791	0.15813	5.86821	5.72E-09
c(279)	0.00168	0.00279	0.60112	0.54788
c(379)	0.82031	0.38378	2.13748	0.03276
c(280)	0.00132	0.00109	1.21236	0.22562
c(380)	0.94104	0.10306	9.13076	2.89E-19
c(281)	0.01950	0.00447	4.35983	1.42E-05
c(381)	0.46748	0.10137	4.61155	4.43E-06
c(282)	0.01928	0.00571	3.37562	0.00076
c(382)	0.35117	0.19296	1.81987	0.06903
c(283)	0.01535	0.00361	4.25712	2.24E-05
c(383)	0.28887	0.16400	1.76136	0.07844
c(284)	0.00186	0.00226	0.82025	0.41224
c(384)	0.92185	0.10397	8.86615	2.76E-18
Determinant residual covariance		0		26+2

6C. Product DROLS=DOLS*ROLS

	DOLS	ROLS	DROLS		DOLS	ROLS	DROLS
Sector i	c(1i)	c(3i)	c(1i)*c(3i)	Sector i	c(1i)	c(3i)	c(1i)*c(3i)
1	0.79674	0.66546	0.53020	43	0.84046	1.06026	0.89110
2	0.69389	0.93354	0.64777	44	1.07116	0.70162	0.75155
3	0.50341	1.69324	0.85239	45	0.74591	0.67861	0.50618
4	1.00161	0.53593	0.53679	46	0.93833	0.86500	0.81166
5	0.71663	0.63434	0.45459	47	0.78808	0.81403	0.64152
6	0.32726	0.07575	0.02479	48	0.93084	1.02487	0.95398
7	0.55141	0.71578	0.39469	49	0.78118	1.15044	0.89870
8	0.77289	0.90649	0.70062	50	0.41424	0.22798	0.09444
9	0.74510	0.56504	0.42101	51	1.48652	0.47581	0.70731
10	0.67974	1.07575	0.73123	52	0.60331	0.75127	0.45325
11	0.69462	1.01215	0.70306	53	0.87046	0.83757	0.72907
12	1.01569	0.76086	0.77280	54	1.26587	0.61206	0.77479
13	0.80691	0.59654	0.48135	55	0.60581	0.97821	0.59261
14	0.52073	0.94096	0.48998	56	0.81760	0.63204	0.51675
15	0.62692	0.80649	0.50560	57	1.51773	0.47638	0.72302
16	0.80474	1.08336	0.87182	58	1.17176	0.64342	0.75393
17	0.31429	0.35781	0.11246	59	0.75368	1.15778	0.87260
18	0.47300	0.92319	0.43667	60	0.52450	0.11262	0.05907
19	1.04206	0.69403	0.72322	61	0.48131	1.17946	0.56768
20	0.04567	0.06414	0.00293	62	0.45416	0.60926	0.27670
21	0.67235	1.07908	0.72553	63	1.07498	0.62766	0.67472
22	0.78821	0.85312	0.67244	64	0.23131	0.25570	0.05914
23	0.65664	0.97325	0.63908	65	0.97370	0.91981	0.89562
24	0.53396	0.86195	0.46025	66	0.99311	0.36687	0.36434
25	0.77710	0.48743	0.37878	67	1.26717	0.49896	0.63227
26	0.98497	0.39851	0.39252	68	0.69757	0.98887	0.68981
27	1.03850	0.71477	0.74229	69	0.67079	0.62112	0.41664
28	0.62163	0.61576	0.38278	70	0.75349	0.40037	0.30168
29	0.72543	1.14020	0.82713	71	1.14985	0.63324	0.72813
30	0.95756	0.82716	0.79205	72	0.85663	1.07418	0.92017
31	0.84882	0.40885	0.34704	73	1.16088	0.55677	0.64634
32	1.14682	0.85294	0.97818	74	0.98758	0.94105	0.92937
33	0.48103	0.41892	0.20151	75	1.06626	0.85112	0.90752
34	0.52765	0.85414	0.45068	76	0.93102	0.91087	0.84804
35	0.79445	0.89576	0.71164	77	0.91220	1.00873	0.92017
36	0.97954	0.88644	0.86830	78	0.76619	0.92791	0.71096
37	0.22343	0.41516	0.09276	79	0.29994	0.82031	0.24605
38	1.30433	0.71092	0.92727	80	0.90987	0.94104	0.85622
39	0.94130	0.89612	0.84352	81	1.28995	0.46748	0.60302
40	0.80996	0.58509	0.47390	82	0.54478	0.35117	0.19131
41	0.37786	0.77460	0.29269	83	0.62797	0.28887	0.18140
42	0.95314	0.60161	0.57342	84	0.92079	0.92185	0.84883

Appendix7 - Orthogonal regression

7A. Econometric coefficients

	$wrp_i=a1(i)+b1(i)*wrq_i$			$wrq_i=a2(i)+b2(i)*wrp_i$	
I	a1	b1	a2	b2	b1*b2
1	-0.02168	1.13144	0.01916	0.88383	1
2	0.00453	0.83199	-0.00545	1.20194	1
3	0.00289	0.52154	-0.00554	1.91741	1
4	-0.00078	1.52379	0.00051	0.65626	1
5	-0.00029	1.09459	0.00026	0.91358	1
6	-0.10678	10.24298	0.01042	0.09763	1
7	0.00306	0.81322	-0.00376	1.22969	1
8	-0.00003	0.90919	3.76E-05	1.09988	1
9	-0.00054	1.23644	0.00044	0.80877	1
10	0.00122	0.76523	-0.00159	1.30679	1
11	0.00040	0.79936	-0.00051	1.25100	1
12	-0.00014	1.17837	0.00012	0.84863	1
13	-0.00353	1.24210	0.00284	0.80509	1
14	0.00566	0.65924	-0.00858	1.51689	1
15	0.00083	0.83807	-0.00099	1.19322	1
16	0.00094	0.85289	-0.00111	1.17248	1
17	0.00156	0.82504	-0.00189	1.21207	1
18	0.00034	0.60957	-0.00056	1.64051	1
19	-0.00150	1.26915	0.00118	0.78793	1
20	0.01880	0.15483	0.02075	6.45877	1
21	0.04466	0.75824	0.00424	1.31884	1
22	-0.00023	0.95290	0.00024	1.04943	1
23	0.00015	0.78252	-0.00020	1.27793	1
24	0.00786	0.70527	-0.01114	1.41789	1
25	-0.00020	1.45298	0.00014	0.68824	1
26	-0.00152	1.99528	0.00076	0.50118	1
27	-0.00058	1.24156	0.00047	0.80544	1
28	-0.00004	1.00770	4.3E-05	0.99236	1
29	0.00030	0.78022	-0.00039	1.28169	1
30	-0.00005	1.08570	4.45E-05	0.92106	1
31	-0.00261	1.81787	0.00144	0.55009	1
32	-0.00081	1.16144	0.00069	0.86100	1
33	-0.00048	1.16593	0.00041	0.85769	1
34	0.00039	0.70137	-0.00056	1.42579	1
35	0.00006	0.93135	-6.7E-05	1.07371	1
36	-0.00005	1.05504	4.58E-05	0.94783	1
37	0.00209	0.40461	-0.00516	2.47153	1
38	-0.00078	1.36992	0.00057	0.72997	1
39	0.00000	1.02714	2.7E-06	0.97357	1
40	-0.00019	1.26502	0.00015	0.79050	1
41	0.00232	0.53028	-0.00437	1.88578	1
42	-0.00209	1.35244	0.00154	0.73941	1

	$wrp_i=a1(i)+b1(i)*wrq_i$			$wrq_i=a2(i)+b2(i)*wrp_i$	
I	a1	b1	a2	b2	b1*b2
43	0.00029	0.88425	-0.00032	1.13091	1
44	-0.00318	1.27563	0.00249	0.78393	1
45	-0.00009	1.06868	8.41E-05	0.93573	1
46	0.00012	1.04619	-0.00011	0.95585	1
47	0.00026	0.97998	-0.00026	1.02043	1
48	0.00026	0.95193	-0.00027	1.05050	1
49	0.00149	0.81544	-0.00183	1.22633	1
50	-0.00287	2.39059	0.00120	0.41831	1
51	-0.00093	1.94349	0.00048	0.51454	1
52	0.00084	0.85001	-0.00098	1.17645	1
53	-0.00035	1.02281	0.00034	0.97770	1
54	-0.00105	1.50729	0.00069	0.66344	1
55	0.00242	0.73400	-0.00330	1.36240	1
56	-0.00039	1.19553	0.00032	0.83645	1
57	-0.00164	1.95246	0.00084	0.51217	1
58	-0.00028	1.41000	0.00020	0.70922	1
59	0.00010	0.79491	-0.00013	1.25800	1
60	-0.06018	7.11350	0.00846	0.14058	1
61	0.00094	0.55902	-0.00168	1.78884	1
62	0.00947	0.75827	-0.01249	1.31879	1
63	-0.02525	1.38498	0.01823	0.72203	1
64	0.01914	0.81482	-0.02349	1.22726	1
65	-0.00050	1.03054	0.00049	0.97037	1
66	-0.00775	2.17794	0.00356	0.45915	1
67	-0.00940	1.77758	0.00529	0.56256	1
68	0.00829	0.81091	-0.01023	1.23319	1
69	0.00030	1.06138	-0.00028	0.94217	1
70	-0.00080	1.74393	0.00046	0.57342	1
71	-0.00056	1.41582	0.00039	0.70631	1
72	0.00010	0.88875	-0.00011	1.12518	1
73	-0.00179	1.57114	0.00114	0.63648	1
74	-0.00100	1.02535	0.00098	0.97528	1
75	-0.00570	1.12553	0.00507	0.88847	1
76	0.00047	1.01195	-0.00047	0.98819	1
77	-0.00024	0.94892	0.00025	1.05383	1
78	0.00063	0.89271	-0.00071	1.12018	1
79	0.00416	0.39795	-0.01045	2.51286	1
80	-0.00063	0.98196	0.00064	1.01837	1
81	-0.03210	1.89236	0.01696	0.52844	1
82	-0.01886	1.62677	0.01159	0.61472	1
83	-0.02816	2.30350	0.01222	0.43412	1
84	-0.00025	0.99938	0.00025	1.00062	1

7B. Price indices under zero aggregate inflation (πit)

Sector	1990	1991	1992	1993	1994	1995	1996	1997
1	1.676258	0.988675	0.791076	1.061385	0.954209	0.904077	0.97127	1.223339
2	0.772111	0.665175	0.98898	0.894703	0.826234	1.004444	0.77505	0.960391
3	0.87109	0.491218	0.725347	0.79179	0.692116	0.743229	0.798974	0.854178
4	0.923306	0.816522	0.955442	0.865998	0.989531	1.062714	1.080354	0.938393
5	0.896326	0.76145	1.004808	0.804725	0.912458	0.927463	0.975289	1.214783
6	-0.38128	3.61787	2.339638	3.853448	3.186101	2.784628	-2.57786	-23.9316
7	1.009306	0.829049	0.894299	0.859132	0.93029	1.028112	1.051405	1.046735
8	0.848138	0.762742	1.80303	0.869857	0.83242	1.025213	1.056939	1.188935
9	1.449089	0.971903	1.000062	0.932584	0.687935	1.188457	1.430742	1.059366
10	0.890484	1.056781	0.887918	0.979802	0.989414	0.917911	1.046513	1.17773
11	1.989935	1.226477	1.509567	1.27279	0.761207	0.99338	1.297789	0.91914
12	1.262874	1.217234	0.834946	0.956116	0.975621	0.609281	1.159843	1.149536
13	0.816745	0.885348	0.831869	0.758777	0.871659	0.858792	1.381802	1.016266
14	0.842265	0.94447	0.976136	0.929103	0.942494	1.066444	1.045416	0.979372
15	1.367263	0.444067	0.860966	1.005998	0.923426	0.97522	1.199036	1.374657
16	0.698502	0.844691	0.642506	0.828103	0.834854	0.872581	1.076213	1.004083
17	0.641827	0.89486	0.929442	0.737678	1.15477	0.906143	1.030299	1.106989
18	0.879308	0.726196	0.823473	0.750669	0.884833	0.843296	0.930553	1.097912
19	0.769267	0.977882	0.919436	0.83436	0.761854	0.923952	1.22222	1.00675
20	0.692395	0.984487	0.994843	1.007825	1.050712	0.922026	1.149105	0.881275
21	0.964217	0.59468	0.814307	0.912249	1.032798	1.163246	1.266401	1.04472
22	0.714132	0.795275	1.104823	0.709415	0.994106	0.814907	1.133687	1.016948
23	0.92985	0.684384	0.86839	1.318275	0.679202	0.74161	1.120176	1.005779
24	0.821429	1.164465	0.9022	1.004225	0.953161	0.901948	0.984918	1.07109
25	0.101731	2.368834	1.68281	1.382101	1.12851	1.358031	1.05375	0.645327
26	1.066274	1.311883	1.396191	0.962328	0.625759	1.25965	0.732116	0.787595
27	0.476298	1.009647	1.165793	1.019176	0.954821	0.967108	1.04949	0.982534
28	1.041724	0.908226	0.941996	0.919678	0.789574	0.797363	0.822102	1.082078
29	0.86845	0.712746	0.672283	0.809565	0.799383	0.881344	0.829567	0.902862
30	0.885956	0.961673	1.003024	0.823387	0.875896	1.036849	1.109927	0.979081
31	13.909	0.705794	1.035483	1.283049	0.924958	1.112613	1.29825	0.89891
32	0.874243	0.825452	0.692299	0.87997	0.742224	0.816125	0.873856	0.917728
33	0.696428	1.01992	1.065329	0.684085	0.830303	1.200474	1.113105	1.132291
34	0.572371	0.911472	1.068132	1.117053	0.984279	1.038019	1.418781	0.887132
35	0.551383	1.064055	0.962633	1.041822	1.064481	1.247957	1.060936	1.094488
36	0.480843	0.855717	1.625474	1.33097	1.109435	1.16977	0.958818	0.94518
37	1.09922	1.081418	0.966862	0.859028	0.902963	0.988709	1.015055	1.11692
38	1.028428	0.963709	1.008094	0.89692	0.831616	0.737018	0.894719	1.047762
39	1.357031	0.808162	0.952562	0.886191	0.905866	0.546904	0.47603	0.827892
40	0.589088	0.702045	0.958462	1.708942	0.939512	1.043674	1.126721	1.050451
41	1.061579	0.881071	0.980194	0.965824	1.007911	0.810314	1.12165	0.969223
42	0.552733	1.385216	0.683574	0.981281	1.041703	1.084794	1.131618	1.314239
43	0.749243	0.827176	0.701175	0.636591	0.956361	0.978055	0.879382	1.089557
44	0.761526	0.925999	0.850896	0.821369	0.922095	0.950871	1.043308	1.198021
45	0.843806	0.880258	0.834186	0.703635	0.890813	1.07918	1.072606	1.112482

Sector	1990	1991	1992	1993	1994	1995	1996	1997
46	0.803163	0.860894	0.594004	0.898603	0.982019	0.911468	0.571995	1.211509
47	1.573565	0.564151	0.825965	0.959089	0.960794	0.952988	0.936914	0.807983
48	0.761997	0.667225	0.757209	0.793069	0.901408	0.871827	0.854679	1.342409
49	0.77491	0.66178	0.869778	0.650788	0.912932	0.918511	0.902901	1.052309
50	1.151917	0.957027	0.953509	0.205985	0.092944	1.128769	1.448912	1.364134
51	0.856163	1.045143	0.365885	0.736987	0.305254	0.460691	1.275396	1.185873
52	0.74069	0.671236	0.720503	0.750188	1.421684	1.107738	1.014057	1.118674
53	0.63824	0.871202	0.539595	1.064791	1.177814	0.893511	0.988501	1.192125
54	1.072706	0.548808	0.850602	1.038908	0.966866	1.140547	0.647284	1.172547
55	0.818542	1.331829	0.784413	0.909972	0.928335	0.962764	1.157262	1.070463
56	0.834626	0.757174	1.346493	0.526598	0.820289	1.184854	1.048016	1.186994
57	0.683569	1.208406	0.976927	1.455055	0.827348	0.569701	1.924979	1.254839
58	0.69616	1.217851	0.492403	1.160638	0.952357	0.59108	0.763439	0.987186
59	1.001617	0.684428	0.573311	0.469081	1.189167	0.612013	0.957593	0.913818
60	0.386144	0.521073	0.819051	-0.17424	1.638929	1.575673	0.909551	0.844681
61	0.715533	0.693805	0.60066	0.795509	1.295157	0.838195	0.773817	1.207113
62	1.050238	3.571377	0.976097	1.160231	0.972664	0.915413	0.901002	1.132785
63	0.879542	0.731267	0.784631	1.074018	1.16162	0.982153	1.003243	0.910971
64	1.080405	0.941369	0.863965	0.849841	0.976542	1.14292	1.077533	1.090583
65	0.907304	0.620506	0.866184	0.772087	0.763547	1.88147	1.57205	1.044236
66	1.779996	0.7422	1.595532	1.001422	0.893477	1.078261	0.986475	0.464825
67	0.922654	0.898867	1.156169	0.999751	1.042704	0.974554	0.929126	1.063658
68	0.771633	0.989412	1.043724	1.048265	0.840339	0.915597	1.106694	1.093963
69	0.930666	1.057285	0.902429	1.037726	1.104936	1.103472	0.985924	1.127918
70	0.631818	0.650296	0.894125	0.795565	2.128612	1.603317	1.426091	1.168118
71	0.712367	0.885437	1.849903	1.004895	1.468709	1.198085	0.783088	1.159828
72	***	1.07394	0.486531	1.38346	0.931603	0.992905	1.022255	0.909707
73	0.211872	1.817828	0.936784	0.755497	1.138958	0.844513	1.296319	1.158387
74	0.642995	1.216335	0.982757	1.047927	0.896707	0.908715	1.254686	1.132634
75	0.958146	0.953873	1.35317	0.934884	0.940792	0.924792	0.840256	0.826381
76	0.982471	1.109626	2.470415	1.007019	1.084266	1.009557	1.025377	1.232391
77	0.770558	1.048326	0.788571	0.664303	0.73923	0.728544	1.379445	0.838019
78	0.683769	1.000133	0.829041	0.711138	0.975127	1.046758	0.992927	1.043978
79	0.731346	0.728751	0.955425	0.732208	0.913894	1.008502	1.082732	1.050271
80	0.462698	1.854692	0.527164	1.603339	0.813453	0.99138	1.187722	0.879993
81	0.908332	0.790538	1.165349	0.842278	0.93753	0.868876	0.893058	1.069817
82	0.857496	1.301507	1.001281	0.851547	0.780859	0.832923	1.048662	0.964622
83	1.245086	1.114983	1.129647	0.861604	0.855188	0.761176	0.965508	0.871042
84	0.994357	0.759093	0.84611	0.859838	1.030442	1.019793	1.236874	1.118431

7B. Price indices under zero aggregate inflation (πit) - continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005
1	0.911176	1.05984	0.656934	1.150205	0.774048	0.91125	1.094911	0.68079
2	1.192737	0.864288	0.964161	0.96914	0.990978	0.915261	0.998284	0.95676
3	0.981397	1.256538	0.977234	1.577605	1.380044	1.330991	1.179916	1.33127
4	0.972316	1.301512	1.118457	0.892963	1.003246	0.80746	1.122276	0.615543
5	1.119131	0.956119	1.132574	0.925545	1.052656	1.033931	0.85214	1.023569
6	-5.65424	1.200588	1.186788	2.260318	1.393544	1.998487	0.283288	-0.36813
7	1.057963	1.12028	0.972049	0.948465	0.873116	0.924074	1.010108	0.880663
8	0.92339	0.691042	0.934833	0.812693	0.869285	1.060306	1.146288	0.849264
9	1.052179	0.991474	1.020338	0.834464	1.076994	0.770199	0.979275	0.850902
10	0.915344	0.844626	0.960717	1.1582	1.005976	0.931068	0.962064	0.961105
11	0.917402	1.021347	1.414776	0.775205	1.074341	1.25103	0.845584	0.725241
12	1.229666	0.72387	1.21333	0.277392	0.97182	1.041687	0.789074	0.832833
13	0.9215	0.921517	1.186185	0.910801	0.954339	0.889901	0.836233	0.871141
14	0.877189	0.686956	1.070795	1.170611	0.907354	1.150705	0.873589	0.984414
15	1.024955	0.522274	1.270955	1.20334	1.269226	1.406567	1.295341	1.467627
16	0.991179	0.975314	0.976524	0.844761	0.980046	0.94163	0.941735	0.871423
17	0.93953	1.031852	1.069213	0.910735	0.920182	0.882649	0.884053	0.845413
18	0.957554	0.872598	1.032623	1.277805	1.030195	0.999636	1.026068	1.04139
19	1.067588	0.998481	1.17985	0.839841	0.990705	0.975694	0.929554	0.880521
20	1.017147	1.206267	1.039698	0.907386	0.965636	0.903669	1.009264	0.857465
21	1.284579	1.278758	1.192696	1.012733	1.161768	0.93191	0.989496	1.053898
22	0.965258	1.193049	0.929846	0.973792	0.945601	0.880125	0.951773	0.93295
23	0.99936	0.595317	1.241364	0.982694	1.165891	1.206791	1.288053	0.518518
24	1.040127	0.8708	1.012892	0.824104	1.097405	0.964852	1.078499	1.174789
25	0.962063	0.614489	0.697816	0.336044	0.081561	0.256158	0.379567	0.136896
26	0.977298	1.28656	1.137669	1.055788	0.997222	0.823338	0.651495	0.917408
27	1.19761	1.178318	1.042801	0.972874	1.111477	1.031069	0.994438	1.053767
28	1.054413	0.924339	0.826555	0.829705	1.116445	0.985557	1.003073	0.913169
29	1.074234	0.969206	1.003748	1.189757	1.134269	1.096339	1.289922	1.228828
30	0.971195	0.982374	0.902231	0.903779	1.036003	0.830252	0.877926	0.92406
31	1.106811	0.749775	0.236328	0.491696	0.572003	0.983112	0.776807	0.649255
32	0.945873	0.989092	1.186739	1.029383	1.025778	1.047116	1.056698	1.04764
33	1.074991	0.92239	0.986685	0.884048	1.053957	0.829905	0.971518	0.835313
34	1.006711	0.931333	0.894413	0.88209	0.974918	0.980014	1.033976	0.947171
35	1.175029	1.307556	1.314464	0.899452	0.791085	1.041067	1.078937	0.853697
36	1.145246	0.958349	1.005579	1.106696	0.824043	0.886706	1.025749	0.982787
37	1.10045	1.002157	0.98169	0.902743	1.045733	0.92428	1.229978	1.061112
38	1.127061	1.051445	0.892835	0.831291	1.057076	1.010806	1.135982	1.025668
39	1.139208	1.14916	1.498625	0.961072	1.048089	1.004214	1.145778	1.520732
40	1.23791	0.844743	0.927323	0.994215	0.971619	0.991624	1.054905	0.865163
41	0.942585	0.801383	1.209616	0.954471	1.149901	0.999289	1.439276	0.961487
42	1.20315	0.692104	1.318251	1.054545	0.922812	0.760471	0.796881	0.807901
43	0.879098	0.857028	1.231055	1.021591	1.263819	0.875644	1.189459	1.377763
44	1.111269	1.043501	0.94095	0.960766	0.973694	0.739512	1.023698	1.036756
45	1.122312	1.001778	1.505469	0.949889	0.906498	0.941884	0.927904	0.906755

Sector	1998	1999	2000	2001	2002	2003	2004	2005
46	0.675013	1.225031	1.646577	0.914617	1.068639	1.134265	1.423992	1.245586
47	1.200179	0.870062	0.985724	0.99996	1.348418	0.728749	1.295114	1.077545
48	1.375352	0.85403	1.215334	1.087544	1.264601	1.143365	1.203366	1.297221
49	1.073851	1.076684	0.973754	1.088874	1.004296	1.106986	1.07547	1.032464
50	1.11492	0.772666	1.515629	0.615206	0.909584	1.152159	1.266071	1.317567
51	1.41393	1.006402	0.512002	0.182373	0.227826	0.887101	1.044022	1.000335
52	1.032676	0.939706	0.94697	0.917719	1.019643	0.925326	0.944977	1.241758
53	1.06207	0.870241	0.893709	0.837758	0.854743	0.848953	0.957777	0.785101
54	1.071373	0.938619	1.477713	0.860159	1.127077	1.141557	1.031726	0.97748
55	1.019013	0.992521	0.977423	0.997656	1.013628	0.948954	1.033975	0.984192
56	0.969801	1.106882	1.219444	1.05599	0.979665	0.779381	0.980785	1.122707
57	1.195521	1.068314	1.008624	0.693287	0.732914	0.747487	0.905282	0.707309
58	1.04755	1.001463	0.735148	1.249491	0.860302	1.333308	1.121821	1.200213
59	1.244429	1.454619	1.360796	1.5808	0.830801	1.655015	1.993145	1.709782
60	0.458068	0.437147	0.583896	1.321644	1.625565	1.660989	1.1957	0.980197
61	1.118702	1.031164	1.132452	1.253871	0.973962	0.945554	0.970023	0.958656
62	1.166945	1.022116	0.850055	0.824815	1.101039	0.943995	0.97816	1.018626
63	1.006665	0.945786	0.974146	0.934726	0.990287	1.000941	1.01684	1.069958
64	1.187617	1.00919	0.951082	0.899967	0.996595	1.077871	1.063943	1.076011
65	0.991905	1.065165	0.859225	0.900419	0.922772	0.964667	1.026194	1.064648
66	0.379126	0.721401	0.832941	1.011028	1.33525	0.923665	0.828205	0.804235
67	1.065958	1.162857	1.392356	0.89147	0.910194	1.011259	0.780779	0.806753
68	0.986928	1.049242	1.001466	1.029186	1.114402	1.058325	0.883551	1.041658
69	1.03653	1.132233	1.174753	1.069371	0.988674	0.955945	0.92795	1.262259
70	1.060429	0.912827	1.351286	1.322058	1.138148	0.575835	0.644852	0.742026
71	1.352393	1.219283	0.972542	0.989611	1.061901	1.100561	0.685804	1.202633
72	1.081123	1.136069	1.196995	0.822911	1.03183	0.966213	0.962339	0.912501
73	1.234892	1.242923	0.811655	0.973099	0.88093	0.69657	0.845993	0.922008
74	1.112433	1.026613	1.044316	0.915079	1.009602	1.020897	1.027494	0.947556
75	0.953937	0.876848	0.817245	1.012611	0.891979	0.766388	1.066558	0.871954
76	1.135612	1.055632	1.058295	0.918738	1.088663	0.958822	1.010311	1.053437
77	0.914877	1.263751	1.188895	1.546866	0.957085	0.841062	0.850791	0.907086
78	1.12269	0.912642	0.997622	0.840803	1.070366	1.090332	1.074506	1.182375
79	1.056413	0.957919	0.724398	0.960827	1.148555	1.12176	1.145689	1.044347
80	0.979411	1.115256	0.769345	1.819065	0.816114	1.0305	0.911607	1.008153
81	0.869211	0.970765	1.33678	0.898922	1.155588	1.130598	1.050434	1.416243
82	0.905668	1.085726	1.083791	0.859312	0.970985	0.934793	1.077853	1.068774
83	1.099343	0.76778	1.191235	0.506405	1.08411	0.777095	1.197019	1.276428
84	1.134004	1.009458	1.124362	0.887756	1.072855	0.928757	0.972846	0.986566

7C. Price indices under downward price rigidity (prit)

Sector	1990	1991	1992	1993	1994	1995	1996	1997
1	0.166083	0.133496	0.138458	0.151655	0.160129	0.130099	0.141936	0.201998
2	0.0694	0.067623	0.030857	0.046058	0.035443	0.043812	0.037942	0.038062
3	0.026513	0.023255	0.013276	0.010887	0.013987	0.007728	0.006892	0.006196
4	0.002178	0.001942	0.002134	0.001453	0.001641	0.002057	0.00195	0.001463
5	0.004272	0.00375	0.003567	0.002552	0.002487	0.002752	0.002781	0.004037
6	0.00742	0.061099	0.034642	0.067279	0.050846	0.041429	0.007823	0.002348
7	0.020429	0.01697	0.020808	0.014754	0.019569	0.020166	0.022453	0.021969
8	0.002502	0.002549	0.006755	0.003591	0.004297	0.008225	0.00897	0.011619
9	0.002072	0.001586	0.00181	0.002337	0.001959	0.004703	0.006532	0.00396
10	0.003485	0.004132	0.003734	0.005319	0.005951	0.006155	0.006825	0.009409
11	0.001415	0.000789	0.001207	0.0015	0.001337	0.002997	0.005162	0.003841
12	0.005778	0.006467	0.003806	0.004335	0.005221	0.002216	0.002414	0.00254
13	0.013713	0.014822	0.011396	0.010926	0.012263	0.009615	0.019076	0.013695
14	0.013049	0.020123	0.0173	0.013873	0.017964	0.025344	0.030933	0.030908
15	0.015285	0.005807	0.004304	0.003231	0.001802	0.002239	0.002265	0.003594
16	0.033358	0.043739	0.024186	0.017631	0.01585	0.011775	0.014987	0.013358
17	0.016148	0.021491	0.011939	0.008365	0.015398	0.016188	0.019513	0.021801
18	0.001467	0.001868	0.001146	0.000895	0.000887	0.001013	0.001083	0.001364
19	0.008596	0.009952	0.007613	0.006043	0.00503	0.004983	0.007021	0.005005
20	0.006551	0.008577	0.010029	0.007622	0.009281	0.008845	0.014677	0.011389
21	0.004302	0.00256	0.005352	0.003694	0.00289	0.004022	0.005352	0.003666
22	0.002966	0.004004	0.003132	0.001727	0.002409	0.00228	0.004321	0.005843
23	0.000954	0.000783	0.001532	0.005242	0.003902	0.002719	0.001597	0.002004
24	0.00877	0.020694	0.031517	0.03583	0.034811	0.028472	0.02692	0.029434
25	0.000328	0.002176	0.003525	0.002894	0.002049	0.002918	0.001573	0.000794
26	0.002157	0.003033	0.005391	0.002619	0.001536	0.003521	0.001718	0.001318
27	0.001478	0.002057	0.004702	0.00507	0.004776	0.004842	0.004914	0.003789
28	0.00312	0.002827	0.002277	0.002666	0.001272	0.001808	0.001667	0.001798
29	0.004793	0.005773	0.00272	0.00313	0.002227	0.001678	0.00156	0.001377
30	0.00123	0.001378	0.002826	0.002249	0.001395	0.001626	0.001874	0.001322
31	0.052201	0.003002	0.004347	0.006663	0.004223	0.004299	0.005349	0.003236
32	0.009465	0.009546	0.006324	0.005155	0.003434	0.002381	0.002662	0.002564
33	0.00276	0.003805	0.003589	0.002234	0.00238	0.003732	0.003508	0.003691
34	0.000954	0.001059	0.000951	0.000904	0.001011	0.001544	0.003202	0.00193
35	0.000176	0.000288	0.000339	0.000307	0.000356	0.000547	0.000479	0.000554
36	0.000221	0.000313	0.000928	0.001164	0.001434	0.002359	0.00176	0.001588
37	0.002533	0.002066	0.003372	0.004096	0.003434	0.003702	0.003543	0.003886
38	0.010688	0.008971	0.010902	0.00847	0.004661	0.002493	0.002375	0.002511

Sector	1990	1991	1992	1993	1994	1995	1996	1997
39	0.00157	0.001032	0.000963	0.000863	0.00101	0.000402	0.000204	0.000144
40	0.000865	0.00086	0.000889	0.002666	0.001549	0.001418	0.001374	0.001229
41	0.004389	0.002749	0.003867	0.004208	0.005551	0.005296	0.008523	0.006518
42	0.006465	0.014198	0.010443	0.008867	0.008693	0.011381	0.011328	0.014037
43	0.006513	0.007517	0.004152	0.002643	0.002348	0.002942	0.002557	0.003088
44	0.020421	0.022231	0.015277	0.011931	0.01169	0.012941	0.012315	0.017392
45	0.00523	0.006083	0.004043	0.002813	0.003017	0.004162	0.003628	0.00474
46	0.011717	0.01398	0.004948	0.005297	0.005017	0.003996	0.001857	0.001998
47	0.013305	0.005311	0.004757	0.004418	0.00391	0.003842	0.003134	0.002344
48	0.005568	0.00452	0.002342	0.001532	0.001612	0.001219	0.00084	0.001282
49	0.022102	0.021286	0.013344	0.008254	0.00779	0.009319	0.008098	0.00898
50	0.002824	0.002264	0.002552	0.001478	0.001253	0.002385	0.003756	0.003855
51	0.00259	0.002689	0.000712	0.000622	0.000576	0.000481	0.001093	0.001247
52	0.009195	0.009164	0.005702	0.003009	0.009531	0.008906	0.008419	0.010131
53	0.007923	0.008618	0.003929	0.004153	0.007621	0.005806	0.00604	0.008684
54	0.01549	0.006236	0.005056	0.004215	0.003263	0.00459	0.002345	0.002707
55	0.006401	0.014803	0.009493	0.009115	0.007659	0.009092	0.013193	0.013768
56	0.003634	0.003495	0.00461	0.001941	0.001616	0.002822	0.002463	0.00309
57	0.003162	0.003959	0.002842	0.00497	0.002324	0.001077	0.0039	0.002488
58	0.001784	0.002634	0.000935	0.001108	0.00107	0.00036	0.000408	0.000472
59	0.00283	0.002422	0.001509	0.000505	0.001015	0.000397	0.000336	0.000253
60	0.007732	0.009199	0.009612	0.00826	0.017677	0.017152	0.009621	0.009453
61	0.004698	0.006661	0.00293	0.001269	0.002518	0.002183	0.001865	0.003153
62	0.010585	0.066788	0.034388	0.077003	0.042063	0.03823	0.033677	0.025103
63	0.054597	0.052067	0.047135	0.060695	0.07597	0.066591	0.067295	0.059092
64	0.059201	0.043603	0.11975	0.105873	0.086376	0.089857	0.100845	0.102348
65	0.003418	0.002821	0.003108	0.003933	0.003665	0.01623	0.026886	0.01767
66	0.01837	0.007085	0.026011	0.01141	0.00926	0.008402	0.006253	0.004805
67	0.015018	0.015067	0.023869	0.01952	0.017322	0.013502	0.011438	0.013204
68	0.022899	0.028396	0.033671	0.046902	0.053822	0.038027	0.043711	0.048641
69	0.001948	0.002904	0.002711	0.00286	0.007087	0.006693	0.005477	0.006298
70	0.002424	0.001632	0.002812	0.002154	0.012305	0.009685	0.006773	0.005329
71	0.001033	0.001334	0.00489	0.002649	0.005511	0.006717	0.003233	0.003529
72	0	0.002196	0.000908	0.00119	0.001378	0.001916	0.002223	0.002049
73	0.001151	0.005601	0.002691	0.002248	0.003175	0.002299	0.004239	0.003836
74	0.005956	0.013179	0.009649	0.008977	0.011067	0.009641	0.019232	0.021026
75	0.026326	0.032391	0.056867	0.050619	0.050925	0.043499	0.043056	0.025999
76	0.012014	0.014363	0.049813	0.014893	0.016962	0.014873	0.016041	0.020246
77	0.001923	0.002987	0.001771	0.001374	0.001945	0.001166	0.003211	0.002148
78	0.006435	0.008314	0.006216	0.003522	0.004072	0.004947	0.005014	0.004858

Sector	1990	1991	1992	1993	1994	1995	1996	1997
79	0.010191	0.012268	0.008289	0.006769	0.005666	0.006492	0.007604	0.007408
80	0.000985	0.005729	0.00255	0.0064	0.005922	0.00634	0.009981	0.007804
81	0.029261	0.030884	0.045732	0.032363	0.033581	0.028559	0.034981	0.035987
82	0.022696	0.047391	0.03168	0.025832	0.024354	0.021211	0.029931	0.026066
83	0.029749	0.02674	0.028496	0.02033	0.01949	0.014821	0.01998	0.019225
84	0.016154	0.012656	0.014209	0.009478	0.01132	0.01331	0.021199	0.020772
PRt	1.047548	1.13268	1.114817	1.085549	1.071097	1.002457	1.065188	1.084355

7C. Price indices under downward price rigidity (prit) – continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005
1	0.13314	0.123803	0.086575	0.135286	0.095511	0.091214	0.126508	0.085428
2	0.050111	0.036889	0.024352	0.022034	0.026934	0.023038	0.018369	0.013907
3	0.004867	0.005354	0.00315	0.004729	0.004467	0.004796	0.004006	0.004061
4	0.0012	0.00211	0.002072	0.001574	0.001547	0.001241	0.001708	0.001058
5	0.003454	0.002935	0.003879	0.003158	0.003678	0.003824	0.003417	0.003865
6	0.006982	0.013618	0.013904	0.030126	0.017068	0.026396	0.009745	0.009359
7	0.02238	0.028134	0.024935	0.030853	0.030933	0.025251	0.021897	0.018574
8	0.00893	0.005397	0.005075	0.004035	0.004241	0.004719	0.006229	0.004674
9	0.00392	0.002922	0.002554	0.002205	0.002738	0.002009	0.001774	0.001605
10	0.008619	0.005744	0.005069	0.007391	0.006566	0.006745	0.006227	0.005864
11	0.003706	0.003336	0.006958	0.005295	0.006547	0.010625	0.006134	0.005546
12	0.003082	0.001095	0.001435	0.000426	0.000519	0.000578	0.000445	0.000447
13	0.01237	0.009874	0.012813	0.010523	0.011509	0.010112	0.007978	0.008429
14	0.029957	0.014166	0.015167	0.022416	0.018063	0.023774	0.015639	0.01833
15	0.004768	0.00168	0.003027	0.002105	0.001725	0.001739	0.001354	0.000982
16	0.009154	0.007872	0.007424	0.007743	0.008786	0.008388	0.007474	0.006754
17	0.016692	0.015019	0.016216	0.014168	0.015321	0.014587	0.01241	0.012401
18	0.001264	0.000772	0.000759	0.001085	0.000871	0.000795	0.00069	0.000704
19	0.00526	0.004488	0.005919	0.004191	0.005596	0.005713	0.005224	0.004885
20	0.010062	0.012157	0.010082	0.009153	0.010213	0.010463	0.011226	0.010627
21	0.00361	0.004393	0.004467	0.004232	0.005631	0.00474	0.003904	0.003897
22	0.004682	0.006456	0.005596	0.005421	0.005504	0.005222	0.005097	0.005096
23	0.000839	0.000388	0.000469	0.000374	0.000421	0.000424	0.000421	6.47E-05
24	0.033917	0.027377	0.025723	0.021564	0.024131	0.024202	0.01976	0.019951
25	0.000388	0.000271	0.000271	0.000197	0.000152	0.000165	0.000169	0.00015
26	0.00136	0.00205	0.001915	0.001753	0.001593	0.001371	0.00107	0.001228
27	0.004209	0.004514	0.003384	0.003306	0.003991	0.00357	0.002823	0.003134
28	0.001635	0.001345	0.001076	0.00088	0.001068	0.00093	0.000869	0.000763
29	0.001451	0.000894	0.00078	0.000971	0.000838	0.00072	0.000686	0.000486

Sector	1998	1999	2000	2001	2002	2003	2004	2005
30	0.000952	0.000784	0.000606	0.000489	0.000541	0.000396	0.000308	0.000304
31	0.003504	0.002404	0.001704	0.001834	0.002047	0.002654	0.002324	0.002219
32	0.002575	0.002722	0.003674	0.004104	0.004369	0.005145	0.005279	0.005732
33	0.003918	0.002745	0.002797	0.002289	0.002917	0.002209	0.002069	0.001865
34	0.00198	0.001699	0.001654	0.00131	0.001322	0.001196	0.001124	0.00093
35	0.000586	0.000777	0.001035	0.000791	0.000665	0.000701	0.000745	0.000549
36	0.00187	0.001461	0.001285	0.001522	0.00127	0.001072	0.000999	0.001065
37	0.003946	0.003642	0.003434	0.00306	0.003573	0.002883	0.003462	0.003035
38	0.002396	0.002273	0.001777	0.001604	0.00216	0.002219	0.002586	0.002477
39	0.00012	0.000125	0.000235	0.000164	0.000184	0.000166	0.000204	0.000408
40	0.001914	0.001009	0.00083	0.000815	0.000798	0.00072	0.000764	0.000614
41	0.007018	0.003685	0.004864	0.003887	0.005074	0.002887	0.004956	0.004199
42	0.011453	0.005054	0.008552	0.007775	0.006703	0.005007	0.003767	0.003952
43	0.001805	0.001002	0.001247	0.001029	0.001677	0.000882	0.000864	0.001153
44	0.013453	0.011428	0.009711	0.009889	0.01052	0.008649	0.011477	0.012654
45	0.003744	0.002919	0.005213	0.003382	0.003481	0.003027	0.002226	0.002352
46	0.000888	0.00102	0.001847	0.001032	0.001233	0.001333	0.001963	0.001522
47	0.002353	0.001714	0.001352	0.001231	0.002071	0.000885	0.000974	0.000709
48	0.001237	0.000925	0.00115	0.000972	0.001409	0.001361	0.001367	0.00179
49	0.007169	0.006175	0.005252	0.005363	0.005307	0.00527	0.0045	0.003756
50	0.002297	0.001639	0.00339	0.001651	0.001858	0.002524	0.002959	0.00332
51	0.001949	0.001073	0.000718	0.000524	0.000537	0.000724	0.000918	0.000958
52	0.008275	0.006086	0.006285	0.006134	0.008163	0.008184	0.006966	0.012799
53	0.00519	0.004082	0.003868	0.003201	0.00292	0.002637	0.002673	0.002417
54	0.002065	0.001652	0.003249	0.001891	0.002543	0.002868	0.002331	0.002156
55	0.010574	0.008226	0.00669	0.007856	0.010304	0.01179	0.014746	0.017891
56	0.002586	0.00242	0.003104	0.003011	0.002765	0.00225	0.002134	0.002816
57	0.00222	0.002033	0.001981	0.001439	0.001469	0.001441	0.001652	0.001424
58	0.000618	0.000628	0.000559	0.000839	0.000679	0.001202	0.001019	0.001276
59	0.000267	0.000304	0.000272	0.000362	0.000117	0.000163	0.000191	0.000194
60	0.008997	0.008329	0.009121	0.014018	0.017678	0.018258	0.012255	0.009691
61	0.002369	0.002084	0.002287	0.002931	0.002299	0.002201	0.002156	0.002023
62	0.034471	0.026808	0.034126	0.026838	0.034419	0.033397	0.027937	0.026401
63	0.05747	0.052438	0.058256	0.053114	0.060187	0.06539	0.067043	0.07653
64	0.131522	0.124629	0.124311	0.101648	0.099303	0.112486	0.107127	0.124295
65	0.018402	0.020961	0.017664	0.013445	0.012904	0.012218	0.011994	0.013513
66	0.004245	0.004716	0.005535	0.007383	0.009841	0.006625	0.005485	0.005223
67	0.013714	0.016552	0.023546	0.01359	0.013895	0.013528	0.010008	0.00955
68	0.039625	0.043237	0.041798	0.041475	0.048651	0.054457	0.043472	0.052837
69	0.009204	0.007254	0.007253	0.007633	0.007021	0.00484	0.003136	0.004352

Sector	1998	1999	2000	2001	2002	2003	2004	2005
70	0.003122	0.001776	0.003246	0.003616	0.001892	0.000998	0.000708	0.000759
71	0.004056	0.0048	0.004092	0.003279	0.003055	0.002911	0.001647	0.00236
72	0.001986	0.002963	0.004186	0.003111	0.003557	0.003364	0.003401	0.003467
73	0.004557	0.006246	0.003964	0.003436	0.002904	0.002519	0.002087	0.002325
74	0.023487	0.03059	0.040109	0.034437	0.038579	0.035079	0.034743	0.031568
75	0.019791	0.018398	0.019406	0.021526	0.022232	0.022151	0.026306	0.023742
76	0.087454	0.085682	0.094001	0.077495	0.094309	0.083205	0.077915	0.086551
77	0.001929	0.003733	0.005351	0.015527	0.011333	0.010076	0.007703	0.007737
78	0.004924	0.003799	0.003795	0.002485	0.002556	0.002615	0.002636	0.003122
79	0.007613	0.008541	0.008125	0.005958	0.006245	0.006596	0.007358	0.007023
80	0.006483	0.011702	0.009715	0.032925	0.017697	0.019264	0.01476	0.017663
81	0.029519	0.035625	0.058552	0.038155	0.047829	0.048255	0.060106	0.086976
82	0.023187	0.033617	0.037095	0.027508	0.029062	0.028614	0.036826	0.039305
83	0.021304	0.018432	0.028384	0.016115	0.021939	0.019064	0.030848	0.035927
84	0.022364	0.024013	0.038225	0.028447	0.03116	0.026007	0.026018	0.027673
PRt	1.082723	1.02368	1.065524	1.032737	1.045383	1.033914	1.014476	1.049419

7D. GVA indices under downward output rigidity (qrit)

Sector	1990	1991	1992	1993	1994	1995	1996	1997
1	0.088537	0.120807	0.139701	0.13648	0.153339	0.140171	0.14504	0.178697
2	0.073817	0.080773	0.026903	0.044838	0.038532	0.04215	0.048439	0.04211
3	0.02569	0.040468	0.015195	0.012582	0.019532	0.01017	0.009437	0.008309
4	0.002116	0.001886	0.001957	0.001461	0.001587	0.001893	0.001838	0.001551
5	0.004172	0.003857	0.003192	0.002748	0.002429	0.002886	0.002845	0.003609
6	0.012823	0.016171	0.014329	0.017095	0.015692	0.014745	0.011396	0.010765
7	0.016128	0.015865	0.018198	0.015064	0.018525	0.018915	0.02199	0.02329
8	0.002566	0.002622	0.003342	0.003606	0.004584	0.007784	0.0087	0.010678
9	0.001299	0.001459	0.00166	0.002238	0.002402	0.003852	0.00467	0.004045
10	0.003187	0.0033	0.003203	0.004961	0.005588	0.006457	0.006727	0.00888
11	0.000551	0.000516	0.000657	0.001091	0.001645	0.002912	0.004091	0.004261
12	0.003987	0.004736	0.003648	0.004117	0.004976	0.003491	0.002131	0.002404
13	0.014935	0.013493	0.011061	0.012149	0.012447	0.010946	0.014082	0.014466
14	0.012317	0.016937	0.014481	0.01271	0.016686	0.022797	0.030555	0.034581
15	0.009574	0.011024	0.003925	0.002994	0.001697	0.002198	0.001961	0.002949
16	0.039542	0.040563	0.030359	0.018658	0.016943	0.013058	0.014306	0.014644
17	0.020954	0.018896	0.010432	0.010254	0.012601	0.017274	0.019466	0.021703
18	0.001375	0.002064	0.001096	0.001133	0.000893	0.001149	0.00114	0.001409
19	0.009401	0.008979	0.006913	0.006271	0.00567	0.005267	0.00586	0.005324
20	0.006703	0.001743	0.003165	0.004429	0.005856	0.007722	0.014438	0.020652
21	0.003667	0.003879	0.005225	0.00347	0.002589	0.003308	0.004373	0.003981
22	0.003454	0.003955	0.002552	0.00207	0.002305	0.002721	0.003902	0.006258
23	0.000865	0.000927	0.001395	0.00376	0.005166	0.003552	0.001467	0.002196
24	0.007798	0.014562	0.026871	0.033255	0.032598	0.030289	0.027882	0.031074
25	0.001871	0.000832	0.001882	0.001993	0.001735	0.002088	0.001527	0.001161
26	0.001857	0.00214	0.003524	0.002523	0.001861	0.002734	0.002019	0.001473
27	0.002373	0.001864	0.003645	0.004741	0.004569	0.004871	0.004789	0.004098
28	0.002605	0.002518	0.002034	0.002535	0.001426	0.002201	0.001945	0.001812
29	0.00474	0.006397	0.003308	0.003408	0.00252	0.001836	0.001873	0.001583
30	0.001211	0.00123	0.002515	0.002383	0.001415	0.001523	0.00173	0.001441
31	0.003448	0.003177	0.003897	0.004999	0.004114	0.003791	0.004188	0.003454
32	0.00949	0.009111	0.007194	0.005122	0.003974	0.002851	0.002862	0.002748
33	0.003295	0.003016	0.003047	0.002739	0.002518	0.003028	0.003221	0.003525
34	0.001484	0.000879	0.000732	0.000738	0.000936	0.001427	0.002328	0.002269
35	0.000279	0.000233	0.000295	0.000276	0.000315	0.000423	0.000464	0.000559
36	0.000362	0.000291	0.000514	0.000832	0.001233	0.001957	0.001803	0.001732
37	0.00132	0.001126	0.002443	0.004252	0.003298	0.003478	0.003709	0.004283
38	0.009097	0.008039	0.009698	0.008264	0.004942	0.003257	0.002512	0.002566

Sector	1990	1991	1992	1993	1994	1995	1996	1997
39	0.001005	0.001002	0.000859	0.000851	0.000991	0.00071	0.00041	0.000174
40	0.001194	0.000943	0.000808	0.001487	0.001482	0.001322	0.001246	0.001265
41	0.003012	0.001971	0.002969	0.003764	0.005032	0.006209	0.007902	0.007531
42	0.009344	0.009283	0.01195	0.008488	0.008017	0.010224	0.010225	0.011531
43	0.007172	0.007116	0.004778	0.003747	0.00222	0.002909	0.002829	0.003128
44	0.022497	0.020041	0.014502	0.01253	0.011356	0.013277	0.012039	0.015636
45	0.005392	0.005433	0.003878	0.003472	0.00301	0.003744	0.003466	0.004649
46	0.012426	0.012736	0.006697	0.005146	0.00477	0.004249	0.003203	0.001813
47	0.007305	0.007492	0.004595	0.004175	0.003709	0.003903	0.003226	0.00299
48	0.006026	0.005365	0.002488	0.001714	0.001585	0.001349	0.00098	0.001069
49	0.023405	0.025586	0.012115	0.011705	0.007535	0.009787	0.008754	0.009498
50	0.002286	0.002145	0.002405	0.00238	0.001719	0.002086	0.002628	0.002977
51	0.00269	0.002341	0.000986	0.000648	0.000758	0.0007	0.000866	0.001104
52	0.010203	0.010882	0.006434	0.003665	0.006334	0.00777	0.008537	0.00999
53	0.010266	0.007798	0.005655	0.003716	0.006175	0.006313	0.006184	0.00793
54	0.012627	0.00862	0.004793	0.003883	0.003139	0.003925	0.003149	0.002459
55	0.006353	0.009515	0.009736	0.008618	0.00719	0.009063	0.011772	0.014365
56	0.003822	0.003611	0.003086	0.003007	0.001724	0.00232	0.002402	0.002815
57	0.00384	0.003006	0.002624	0.003282	0.002434	0.001552	0.002056	0.002089
58	0.002129	0.001945	0.001395	0.000915	0.001028	0.000534	0.000464	0.000498
59	0.002436	0.002796	0.002155	0.001052	0.000806	0.000658	0.000348	0.000292
60	0.010209	0.009573	0.009585	0.009467	0.010673	0.010813	0.009688	0.009645
61	0.005352	0.007756	0.004454	0.001558	0.001769	0.002477	0.002728	0.003011
62	0.007101	0.015239	0.029282	0.062287	0.039435	0.040139	0.036831	0.025384
63	0.05629	0.054548	0.047676	0.05453	0.063128	0.066318	0.068313	0.063445
64	0.044468	0.036158	0.109031	0.109476	0.081084	0.075566	0.096549	0.104762
65	0.003335	0.003439	0.002906	0.004385	0.004186	0.008383	0.017522	0.01845
66	0.009428	0.007288	0.014915	0.010988	0.009229	0.007665	0.006321	0.006262
67	0.014827	0.013982	0.018972	0.018783	0.016068	0.013598	0.011659	0.013076
68	0.023345	0.024109	0.027633	0.041897	0.057505	0.039984	0.040754	0.049551
69	0.00178	0.00241	0.002385	0.002599	0.006092	0.005875	0.005622	0.006129
70	0.003146	0.001875	0.002563	0.00232	0.005524	0.005873	0.004858	0.004943
71	0.001221	0.00123	0.002398	0.00252	0.003591	0.00545	0.003884	0.003289
72	-1.4E-05	0.001806	0.001562	0.00081	0.001309	0.001868	0.002233	0.002283
73	0.001994	0.002866	0.002522	0.002421	0.002708	0.002675	0.003324	0.003513
74	0.007623	0.009741	0.008705	0.008174	0.010976	0.010321	0.015691	0.0202
75	0.024519	0.029359	0.038	0.048261	0.048716	0.045781	0.048584	0.030599
76	0.010553	0.011456	0.017917	0.014	0.014868	0.014278	0.016052	0.018
77	0.002098	0.002561	0.001792	0.001728	0.002288	0.001539	0.00238	0.002533
78	0.007792	0.007312	0.005968	0.004488	0.003842	0.004564	0.005158	0.005152

Sector	1990	1991	1992	1993	1994	1995	1996	1997
79	0.010778	0.014017	0.006248	0.010092	0.005221	0.005932	0.007465	0.008681
80	0.001467	0.002817	0.003536	0.003818	0.00641	0.006223	0.0086	0.008847
81	0.030202	0.030785	0.036817	0.032934	0.032781	0.032394	0.036383	0.03519
82	0.024506	0.033658	0.029457	0.026199	0.026115	0.02505	0.028971	0.027413
83	0.022354	0.022677	0.023809	0.020442	0.019774	0.018898	0.020176	0.020326
84	0.014136	0.013078	0.013437	0.009625	0.010469	0.012669	0.017566	0.020278
QRt	1.041333	1.105581	1.067555	1.052096	1.036869	1.002954	1.027643	1.018644

7D. GVA indices under downward output rigidity (qrit) - continuation

Sector	1998	1999	2000	2001	2002	2003	2004	2005
1	0.141296	0.117844	0.113929	0.113121	0.113641	0.094899	0.116272	0.111521
2	0.044726	0.04245	0.023875	0.021448	0.026976	0.023943	0.018581	0.014077
3	0.005462	0.004364	0.003011	0.002608	0.003248	0.003441	0.003463	0.002854
4	0.001239	0.001633	0.001831	0.001646	0.001543	0.001389	0.001529	0.001388
5	0.003247	0.0031	0.003375	0.003242	0.003498	0.003637	0.003967	0.003695
6	0.011019	0.011353	0.011695	0.013195	0.012251	0.013158	0.011395	0.01138
7	0.022578	0.025418	0.024476	0.030871	0.034301	0.025944	0.02187	0.01959
8	0.00944	0.007698	0.005014	0.004585	0.004669	0.004372	0.005475	0.005124
9	0.003914	0.002974	0.00247	0.002427	0.002545	0.002392	0.001822	0.001747
10	0.0093	0.006844	0.004963	0.006017	0.006537	0.006863	0.006534	0.005925
11	0.003977	0.003306	0.004832	0.006368	0.006103	0.008333	0.007239	0.00722
12	0.002643	0.001462	0.001165	0.001177	0.00052	0.000547	0.000543	0.000494
13	0.012937	0.010744	0.010675	0.010891	0.011541	0.010697	0.009252	0.009014
14	0.034315	0.023196	0.0138	0.017882	0.019546	0.02014	0.018059	0.017997
15	0.004974	0.003918	0.002327	0.001624	0.001362	0.001196	0.001061	0.000631
16	0.009741	0.008169	0.007288	0.008493	0.008799	0.008484	0.008005	0.007214
17	0.017754	0.014729	0.014893	0.014402	0.016026	0.015781	0.013981	0.013711
18	0.001368	0.0009	0.000714	0.000785	0.000847	0.000771	0.000681	0.000648
19	0.005141	0.00453	0.004955	0.004579	0.005601	0.005772	0.005653	0.00518
20	0.01349	0.010746	0.008696	0.00694	0.010299	0.011984	0.011611	0.012292
21	0.00306	0.003488	0.00366	0.003916	0.004855	0.004813	0.003987	0.003578
22	0.004935	0.005466	0.005559	0.005324	0.005572	0.005626	0.005394	0.005337
23	0.000899	0.000749	0.000368	0.000354	0.000362	0.000341	0.000331	0.00025
24	0.035109	0.031592	0.024811	0.024696	0.022033	0.024337	0.018545	0.016339
25	0.000403	0.000367	0.000313	0.000321	0.000274	0.000245	0.000248	0.000263
26	0.001394	0.001602	0.001669	0.00162	0.001594	0.001492	0.001337	0.001302
27	0.003688	0.003866	0.003201	0.003264	0.003595	0.003409	0.002856	0.002917
28	0.001637	0.001468	0.001197	0.000979	0.000957	0.000927	0.000872	0.000799
29	0.001451	0.000936	0.000758	0.000761	0.00074	0.000638	0.000538	0.000378
30	0.001004	0.000806	0.000619	0.000502	0.000522	0.000448	0.000348	0.000319
31	0.003265	0.00285	0.002479	0.002364	0.002458	0.002677	0.00274	0.002695
32	0.002682	0.002774	0.003057	0.003837	0.004264	0.004839	0.005028	0.005362
33	0.003829	0.002991	0.002759	0.002403	0.002771	0.002484	0.002143	0.002062
34	0.002111	0.00185	0.001726	0.00136	0.001324	0.001189	0.0011	0.000947
35	0.000531	0.000601	0.000774	0.000809	0.000819	0.00066	0.000696	0.0006
36	0.001723	0.00154	0.001258	0.001314	0.001469	0.001146	0.000981	0.00106
37	0.004086	0.003727	0.003297	0.002901	0.003428	0.002942	0.002875	0.002677
38	0.002215	0.002179	0.001818	0.001762	0.002045	0.002166	0.00229	0.002373

Sector	1998	1999	2000	2001	2002	2003	2004	2005
39	0.000111	0.00011	0.000154	0.000163	0.000176	0.000162	0.000179	0.000262
40	0.001626	0.001166	0.000827	0.000789	0.000799	0.000716	0.000729	0.00066
41	0.007669	0.005155	0.003887	0.003687	0.004424	0.00276	0.003503	0.004167
42	0.009975	0.006714	0.006408	0.007106	0.006899	0.00593	0.004492	0.004437
43	0.00204	0.001175	0.000992	0.000947	0.001329	0.000973	0.000735	0.000811
44	0.012655	0.011041	0.009595	0.009937	0.010531	0.0105	0.011277	0.011983
45	0.003522	0.002943	0.003409	0.003402	0.003674	0.003071	0.002417	0.002462
46	0.001334	0.000843	0.001102	0.001051	0.001156	0.001152	0.00139	0.001191
47	0.002087	0.001958	0.001326	0.001163	0.001538	0.001223	0.000759	0.000637
48	0.000966	0.001088	0.000927	0.00084	0.001116	0.001164	0.001146	0.001342
49	0.007162	0.005815	0.005139	0.004616	0.005294	0.004643	0.004229	0.003512
50	0.00211	0.001874	0.00222	0.001999	0.001893	0.002173	0.002346	0.002489
51	0.00143	0.001072	0.000909	0.000865	0.00072	0.000757	0.000883	0.000947
52	0.008527	0.006556	0.006169	0.006228	0.008018	0.008397	0.007435	0.010048
53	0.005146	0.004613	0.003985	0.00352	0.003231	0.002922	0.002809	0.00283
54	0.001998	0.001771	0.002174	0.00203	0.002258	0.002421	0.002271	0.002171
55	0.011158	0.00841	0.00653	0.007364	0.010183	0.011893	0.014395	0.017686
56	0.002715	0.002206	0.00251	0.002736	0.002769	0.002684	0.00219	0.002458
57	0.001915	0.001914	0.001946	0.001713	0.001662	0.001637	0.001827	0.001682
58	0.000613	0.000632	0.000652	0.00065	0.000734	0.000889	0.000914	0.001043
59	0.000234	0.000213	0.000195	0.000213	0.000155	9.47E-05	9.77E-05	0.000108
60	0.009604	0.009575	0.009506	0.010508	0.010878	0.010947	0.010263	0.009854
61	0.002335	0.00206	0.001961	0.002154	0.002304	0.002202	0.002253	0.002023
62	0.031942	0.026637	0.038153	0.026875	0.031318	0.033634	0.028872	0.025038
63	0.05931	0.055836	0.057616	0.055059	0.060243	0.064491	0.066294	0.070305
64	0.118416	0.125045	0.121947	0.103386	0.099466	0.102085	0.101629	0.112331
65	0.019426	0.019881	0.018949	0.013819	0.013376	0.012395	0.011773	0.012413
66	0.005327	0.005502	0.00575	0.007131	0.007375	0.006826	0.00626	0.005758
67	0.013299	0.014328	0.016725	0.014259	0.014345	0.013233	0.011909	0.01061
68	0.042475	0.04175	0.040905	0.037991	0.043728	0.050358	0.04908	0.049328
69	0.009404	0.006477	0.006071	0.006799	0.00703	0.004901	0.003407	0.003362
70	0.003086	0.001933	0.002371	0.002631	0.001664	0.001373	0.000908	0.000874
71	0.003148	0.003974	0.004033	0.00318	0.00288	0.002605	0.002262	0.001926
72	0.001949	0.002637	0.00344	0.003498	0.003452	0.003408	0.003561	0.003624
73	0.003836	0.005066	0.004353	0.003422	0.003058	0.003069	0.002375	0.002459
74	0.022264	0.030101	0.037808	0.035262	0.038262	0.033767	0.034061	0.032574
75	0.020632	0.020497	0.02127	0.020518	0.023499	0.026439	0.024813	0.025366
76	0.081439	0.082028	0.087395	0.07923	0.086744	0.084342	0.077707	0.080268
77	0.002042	0.002982	0.004433	0.00959	0.011348	0.011357	0.008977	0.0081
78	0.004677	0.004153	0.003723	0.002749	0.002392	0.002343	0.002477	0.002564

Sector	1998	1999	2000	2001	2002	2003	2004	2005
79	0.008216	0.00912	0.01323	0.00544	0.005458	0.005589	0.00655	0.006331
80	0.006817	0.010596	0.011534	0.017302	0.02066	0.018373	0.016309	0.017134
81	0.031067	0.036906	0.043371	0.039913	0.041422	0.042224	0.057524	0.060395
82	0.024092	0.031167	0.033865	0.02954	0.029085	0.029258	0.034337	0.036199
83	0.019788	0.021366	0.023641	0.020815	0.020247	0.021051	0.025873	0.027782
84	0.020834	0.024036	0.033457	0.029618	0.029082	0.026604	0.026945	0.027413
QRt	1.010636	1.02221	1.047815	1.015396	1.031424	1.020286	1.006222	1.03229

7E. Synthesis (total economy)

Year	PR	Q	P	QR	QE*OF
1990	1.04755	0.97569	1.12827	1.04133	0.93696
1991	1.13268	0.88236	2.91400	1.10558	0.79809
1992	1.11482	0.91027	3.22312	1.06756	0.85267
1993	1.08555	1.03288	3.06137	1.05210	0.98174
1994	1.07110	1.04253	2.37536	1.03687	1.00546
1995	1.00246	1.06770	1.34259	1.00295	1.06455
1996	1.06519	1.03914	1.45830	1.02764	1.01119
1997	1.08435	0.92741	2.42066	1.01864	0.91043
1998	1.08272	0.94592	1.53765	1.01064	0.93597
1999	1.02368	0.98594	1.45767	1.02221	0.96452
2000	1.06552	1.02205	1.43965	1.04782	0.97541
2001	1.03274	1.06672	1.38142	1.01540	1.05054
2002	1.04538	1.05074	1.23144	1.03142	1.01872
2003	1.03391	1.04866	1.21894	1.02029	1.02781
2004	1.01448	1.08358	1.14314	1.00622	1.07688
2005	1.04942	1.03607	1.11396	1.03229	1.00366