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INFRASTRUCTURE AND PRIVATE-SECTOR PRODUCTIVITY

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INTRODUCTION AND SUMMARY

The idea that investment in infrastructure may influence productivity has natural appeal: one need only imagine an economy with trucks but no roads, or ships without ports. In an attempt to pin down such a relationship more precisely, Aschauer **(1989)** assumed an aggregate Cobb-Douglas technology in which output is produced by the usual private-sector capital and labour inputs, plus public-sector capital, or infrastructure. For the United States, he concluded that infrastructure had a very strong positive effect on private-sector total factor productivity (TFP), a proposition that has been dubbed the "Aschauer hypothesis". While this finding has been recently confirmed by Munnel **(1990*a*),** it remains quite controversial, largely because many economists find the marginal productivity of infrastructure implied by the estimates to be implausibly high. However, if spillovers are as important as the Aschauer results imply, there is an obvious and important policy implication: governments can increase real output and productivity substantially by stepping up infrastructure investment. Munnell **(1991)** makes a strong case for such a policy, based on her reading of the empirical evidence that productivity would be substantially enhanced[1].

In view of the stakes for public policy and economic welfare, it is important to assess the empirical foundations behind the recommendation for accelerated public investment. The Aschauer approach could be attacked on several grounds (Aaron, **1990).** For example, none of the other possible explanations of the observed productivity slowdown were included in his regressions. It is possible that they would econometrically dominate, or at least reduce the estimated effect of, infrastructure. Tatom **(1991)** concluded that the deceleration in infrastructure was concentrated in the construction of schools and roads, which he concluded were easily explained by demand variables such as demographics, driving patterns and relative price shifts. Rubin **(1991)** found that the school-aged population explained productivity growth "as well as any measure of the public capital stock tested", and points out that this relationship is almost certainly spurious[2].

An alternative interpretation of Aschauer's result is that causality does not run from infrastructure investment to output and productivity, as assumed by Aschauer, but the other way around. That is, when productivity growth is high and incomes are rising rapidly, governments are more inclined to invest in public works. In the context of the provision of public goods, it could be argued that public infrastructure is a "superior" good – the demand for it grows more rapidly than income. If so, infrastructure will appear to be closely related to productivity, which is an important determinant of income, and countries with high incomes will tend to have high levels of infrastructure.

Aschauer sought to deal with the problem of reverse causation in two ways. First, he used lagged infrastructure investment as an instrument for contemporaneous investment in the regressions, and found that doing so did not change his results.

However, given that the slowdown in TFP was stretched out over many years, it seems to us unlikely that this technique could successfully cope with simultaneity bias. Aschauer also split infrastructure investment into components judged ***ex ante*** to be important to TFP, and those judged not to be important. He found that the first group was more important in explaining the deceleration in TFP. This is a more convincing control for reverse causality than the use of instrumental variables, at least in the absence of a reason why some types of infrastructure investment should be income-elastic, but others not. On the other hand, Fernald (1990) found that infrastructure has not been necessarily related to productivity in sectors that should have benefited the most, in his judgement, from infrastructure investment. Similarly, Rubin (1991) found that in only one of eleven manufacturing industries (petroleum) has productivity been correlated with public-sector capital.

In this note, we ignore these criticisms and adopt the essentials of Aschauer's methodology. The reasons for doing so are that the source of Aschauer's result is clear from even a casual examination of the data and it is, in any case, unclear how the problem of reverse causation can be satisfactorily overcome. However, Aschauer examined only one historical episode and only one country. Since there is no reason why his hypothesis should be restricted to the post-war productivity slowdown in the United States, we hope that more data will shed light on the problem. Therefore, we apply Aschauer's methodology to a broader range of data: several OECD countries and a longer data set for the United States.

To summarise, these data provide little support for Aschauer's hypothesis. While infrastructure growth slowed in the 1970s in all twelve of the countries examined, this was accompanied by a deceleration of private-sector TFP in only about half of them. That is, in the other half, a slowing of infrastructure investment did not appear to slow down productivity growth. Moreover, time-series regressions tend to yield non-robust and sometimes implausible parameter estimates, suggesting a fundamental problem with the underlying methodology. Examination of a century of data for the United States suggests there was no relationship between productivity and infrastructure capital in the United States, except in the post-war period examined by Aschauer. Lastly, the cross-section correlation between post-war infrastructure investment and TFP growth was not robust either, as it depended on how infrastructure was defined.

I. THE MODEL

A Cobb-Douglas technology is assumed to produce private-sector output (Q) using a bundle of private-sector inputs (PIN) and infrastructure capital (INF):

$$Q = a + b*INF + c*PIN \qquad [1]$$

where all variables are in logarithms. Total factor productivity (TFP) of the private-sector inputs is, by definition,

$$TFP = Q - PIN = a + b*INF + (c - 1)*PIN, \qquad [2]$$

which is equation 1.7 in Aschauer's Table 1, and is used for estimation. A capacity utilisation measure (CU) is added to equation [2] to account for cyclical variations in

Table 1. Effect of infrastructure (narrow definition) on total factor productivity

The model: D TFP = a_0 t a_1D INF t a_2D PIN t a_3D CU[1]

	a_0 ×100	a_1	a_2	a_3	SEE ×100	adj.R^2	DW	Rho 1 Rho 2	F-test[2]
United States	1.61	0.39	−0.85	0.39	0.77	0.81	2.2		6.3
1957-89	(2.8)	(3.0)	(5.9)	(10.3)				..	
*	1.56	0.40	−0.84	0.40	0.78	0.80	1.9	−0.13	5.8
	(2.8)	(3.4)	(−5.7)	(10.8)				-0.02	
Japan	−1.43	-0.03	1.74	0.09	2.07	0.31	1.2		4.3
1969-88	(−0.8)	(0.1)	(2.2)	(1.0)				..	
*	0.49	0.13	0.23	0.18	1.53	0.39	2.1	−0.28	81.1
	(0.4)	(0.6)	(0.3)	(2.7)				0.08	
Germany	0.80	0.78	−0.45	0.46	0.81	0.79	2.0		11.9
1962-89	(−1.6)	(6.0)	(−2.4)	(9.3)				..	
*	0.88	0.81	−0.44	0.49	0.83	0.79	1.9	−0.12	12.7
	(−1.6)	(5.9)	(−2.3)	(9.0)				0.08	
France	−0.55	0.55	0.18	0.21	0.72	0.70	1.6		0.9
1967-89	(−0.8)	(3.1)	(0.7)	(4.7)					
*	0.86	0.16	0.40	0.16	0.69	0.69	2.2	0.20	37.0
	(0.7)	(0.5)	(1.4)	(3.9)				0.26	
United Kingdom	1.14	0.21	−0.79	0.08	1.51	0.54	2.3		20.7
1973-88	(0.9)	(0.7)	(−2.4)	(4.5)				..	
*	1.75	-0.03	-0.32	0.06	1.38	0.47	2.4	−0.25	30.8
	(1.8)	(−0.1)	(−1.1)	(3.0)				-0.38	
Canada	−1.27	1.00	-0.42	0.29	0.72	0.85	2.0		1.5
1963-89	(−1.8)	(6.0)	(−3.6)	(11.0)					
*	−1.27	1.00	−0.42	0.29	0.75	0.83	2.0	0.09	4.4
	(−1.8)	(5.6)	(−3.4)	(10.2)	-0.03				
Australia	0.58	0.18	0.03	0.04	1.48	0.29	2.1		52.5
1967-87	(0.6)	(0.8)	(0.2)	(3.2)					
*	1.61	0.27	0.04	0.03	1.43	0.29	2.0	4.26	30.8
	(0.2)	(1.4)	(0.2)	(3.3)	-0.09				
Belgium	−0.56	0.79	0.36	0.21	1.37	0.50	2.8		2.3
1967-88	(−0.7)	(3.2)	(1.0)	(2.7)				..	
*	−0.55	0.74	0.43	0.14	1.18	0.61	2.1	−0.69	1.5
	(−1.4)	(5.8)	(2.1)	(2.5)	-0.20				
Finland	−0.42	0.63	0.55	0.03	1.45	0.51	1.9		4.3
1967-88	(−0.3)	(1.8)	(1.7)	(2.9)				..	
*	−0.19	1.11	0.05	0.04	1.21	0.62	1.4	−0.35	0.7
	(−2.0)	(4.5)	(0.2)	(5.6)				-0.42	
Noway	3.84	-0.55	−0.94	0.05	2.06	0.44	1.8		10.1
1975-87	(1.4)	(−0.9)	(−2.3)	(1.6)					
*	4.88	0.68	−1.24	0.03	1.76	0.31	2.6	-0.07	4.5
	(2.7)	(−1.4)	(−3.2)	(0.9)				0.47	
Sweden	−1.29	0.54	0.02	0.04	1.26	0.53	2.47	-0.44	22.6
1965-83	(−1.3)	(2.8)	(0.0)	(3.7)					
*	−1.57	0.56	0.39	0.05	1.08	0.63	1.4	-0.39	4.7
	(−2.9)	(5.5)	(1.1)	(4.3)					

1. Definition of the variables: TFP: total factor productivity (fixed-weight index); INF capital stock of producers of government services; PIN: combination of private inputs; CU: capacity utilisation indicator from business surveys in manufacturing. All variables are in **logs.** D refers to the first difference.
2. F-test for the null hypothesis of constant returns to scale over all inputs. The number reported in the column indicates the probability (per cent) to wrongly reject this hypothesis.

* With Cochrane-Orcutt correction for second-order autocorrelation.

TFP: this variable proves to be very important, as is discussed below. The estimated coefficients have the following interpretations: c is the elasticity of output with respect to the'private-sector input bundle – if there are constant returns **to** scale in private-sector inputs, then c = **1** and PIN drops out of equation [2]; and b is the elasticity of output (and TFP) with respect to infrastructure.

A weak version of Aschauer's hypothesis is that **"b"** exceeds zero, which is intuitively plausible given the nature of infrastructure. However, the key issue for public investment policy is the size of this parameter. If it is large, as Aschauer argues, further investments in infrastructure will have a handsome pay-off in terms of increased private-sector productivity and output. If it small, further infrastructure investment is not desirable, and even disinvestment may be appropriate. More specifically, if the marginal product of infrastructure exceeds that of private-sector capital, then private-sector output would be increased by increasing the former, even if it crowded-out the latter one-for-one.

II. THE DATA

The data underlying the regressions reported in Tables **1,** 2 and **3** and in Chart **1** are from OECD sources, and are reproduced in the Annex. The private-sector output, employment and capital stock series are drawn from the OECD's Analytical Data Base. This provides series that are, as far as possible, comparable across countries, although variations in definitions and data-collection methods preclude full comparability. The bundle of private-sector inputs is not freely estimated, but rather is computed by weighting private-sector capital and employment by sample-average factor shares. Experimentation with more complicated weighting methods, such as Aschauer's Tornquist index, suggests that the construction of the private-sector Cobb-Douglas index is not crucial to our results. Data for the infrastructure capital stocks are from the OECD's "Flows and Stocks of Fixed Capital", except for the "narrow" definition (see below) for France and Japan, which was cumulated from investment data. The capacity utilisation series refer to the manufacturing sector only and are drawn from the OECD's *Main Economic Indicators.* These are the least internationally comparable of the series used. For example, measures for some countries are quantitative, but for others they are constructed from qualitative survey responses.

Although Aschauer concentrated on public-sector capital, this does not necessarily cover all infrastructure investment and, moreover, the split between publicly-provided and privately-provided infrastructure varies widely from country to country, perhaps for historical reasons. Therefore, two concepts of infrastructure were constructed. The "narrow" definition is the capital stock of "producers of government services", and the "broad" definition includes, in addition, equipment and structures in electricity, gas and water, and structures in transport and communication (these are subtracted from the private-sector capital stock in the relevant regressions). The broad definition is somewhat more internationally comparable. Neither definition includes the military capital stock.

Table 2. Effect of infrastructure (broad definition) on total factor productivity

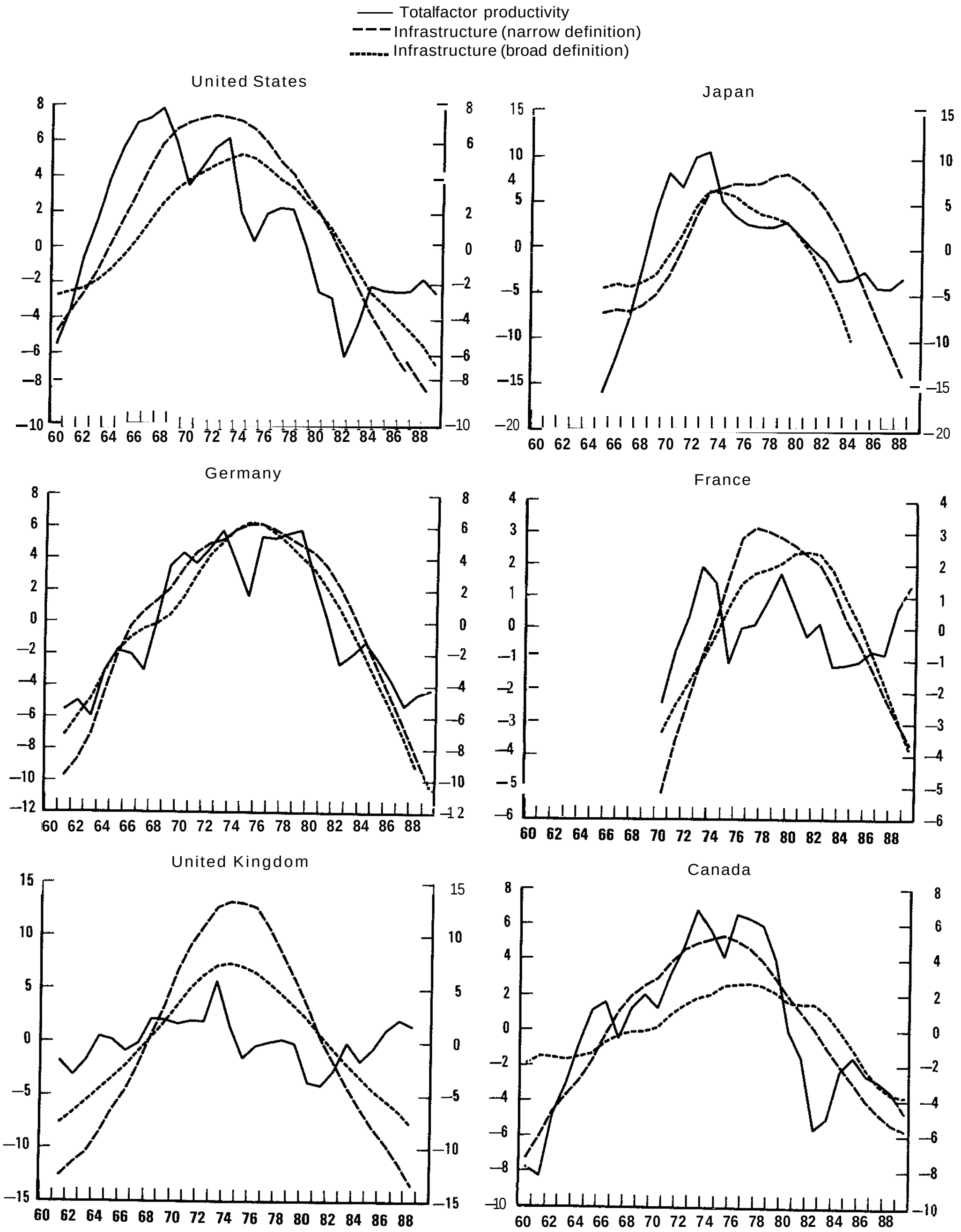
The model: $D\,TFP = a_0 + a_1 D\,INF + a_2 D\,PIN + a_3 D\,CU$[1]

	a_0 x100	a_1	a_2	a	SEE x100	adj. R^2	DW	Rho 1 Rho 2	F-test[2]
United States 1957-89	1.64	0.53	−0.95	0.41	0.79	0.79	2.1		11.3
	(2.7)	(2.7)	(−6.7)	(10.7)					
*	1.62	0.54	−0.95	0.41	0.80	0.78	1.9	−0.05	12.9
	(2.5)	(2.6)	(−6.1)	(10.8)				0.08	
Japan 1969-84	3.38	0.31	1.29	0.12	2.23	0.33	2.1		8.1
	(−1.3)	(0.7)	(1.4)	(1.1)					
*	−1.78	0.48	−0.11	0.21	1.4	0.56	2.3	−0.44	69.1
	(−1.4)	(2.0)	(−0.1)	(3.2)				0.06	
Germany 1962-88	−1.91	0.97	−0.53	0.47	0.78	0.82	2.3		3.5
	(−3.1)	(6.8)	(−3.1)	(9.8)					
*	−2.18	1.02	−0.49	0.48	0.73	0.84	1.9	−0.31	1.4
	(−5.2)	(10.2)	(−3.5)	(10.9)				−0.14	
France 1971-89	1.63	−0.05	0.35	0.16	0.62	0.64	2.3		20.2
	(1.9)	(−0.2)	(1.8)	(3.9)					
*	1.83	−0.13	0.37	0.18	0.53	0.70	2.2	−0.50	14.1
	(3.7)	(−0.8)	(3.2)	(5.0)				−0.28	
United Kingdom 1973-88	0.73	0.39	−0.82	0.08	1.52	0.55	2.3		52.3
	(0.4)	(0.6)	(−2.5)	(4.6)					
*	2.45	−0.23	−0.36	0.05	1.42	0.46	2.3	−0.25	38.5
	(1.2)	(−0.3)	(−1.3)	(2.8)				−0.36	
Canada 1963-89	−3.01	1.39	−0.40	0.32	0.82	0.79	1.3		2.9
	(−2.2)	(4.2)	(−3.1)	(9.8)					
*	−2.47	1.22	−0.39	0.30	0.82	0.80	1.9	0.33	21.0
	(−1.3)	(2.7)	(−2.8)	(9.5)				0.08	
Australia 1967-89	0.30	0.22	0.01	0.04	1.42	0.32	2.3		52.2
	(0.3)	(0.8)	(0.1)	(3.4)					
*	−0.32	0.37	0.03	0.03	I.35	0.35	2.0	−0.35	19.5
	(−0.4)	(1.7)	(0.2)	(3.5)				−0.21	
Belgium 1967-88	−1.11	0.88	0.40	0.20	1.46	0.45	3.0		2.6
	(−1.0)	(3.2)	(1.1)	(2.5)					
*	−1.21	0.85	0.57	0.14	1.22	0.60	2.0	−0.77	1.4
	(−2.7)	(6.6)	(3.1)	(2.5)				−0.25	
Finland 1967-88	1.03	0.30	0.54	0.03	1.52	0.44	1.9		10.9
	(0.7)	(0.9)	(1.6)	(2.6)					
*	0.59	0.41	0.45	0.03	1.55	0.37	1.5	−0.08	6.6
	(0.5)	(1.3)	(1.3)	(2.9)				−0.32	
Norway 1975-87	3.73	−0.52	−0.99	0.05	2.08	0.42	1.8		12.5
	(1.3)	(−0.8)	(−2.5)	(1.7)					
*	5.02	−0.71	−1.28	0.03	1.76	0.31	2.6	−0.13	4.8
	(2.8)	(−1.6)	(−3.6)	(0.9)				−0.52	
Sweden 1965-83	−2.02	0.79	−0.06	0.05	1.28	0.50	2.38		15.2
	(−1.5)	(2.6)	(−0.1)	(3.8)					
*	−2.28	0.83	0.16	0.05	1.17	0.56	1.52	−0.34	5.0
	(−2.8)	(4.5)	(0.4)	(4.2)				−0.35	

1. Definition of the variables: TFP: total factor productivity (fixed-weight index); INF: infrastructure capital (broad definition); PIN: combination of private inputs; CU: capacity utilisation indicator from business surveys in manufacturing. All variables are in logs. D refers to the first difference.
2. F-test for the null hypothesis of constant returns to scale over all inputs. The number reported in the column indicates the probability (per cent) to wrongly reject this hypothesis.

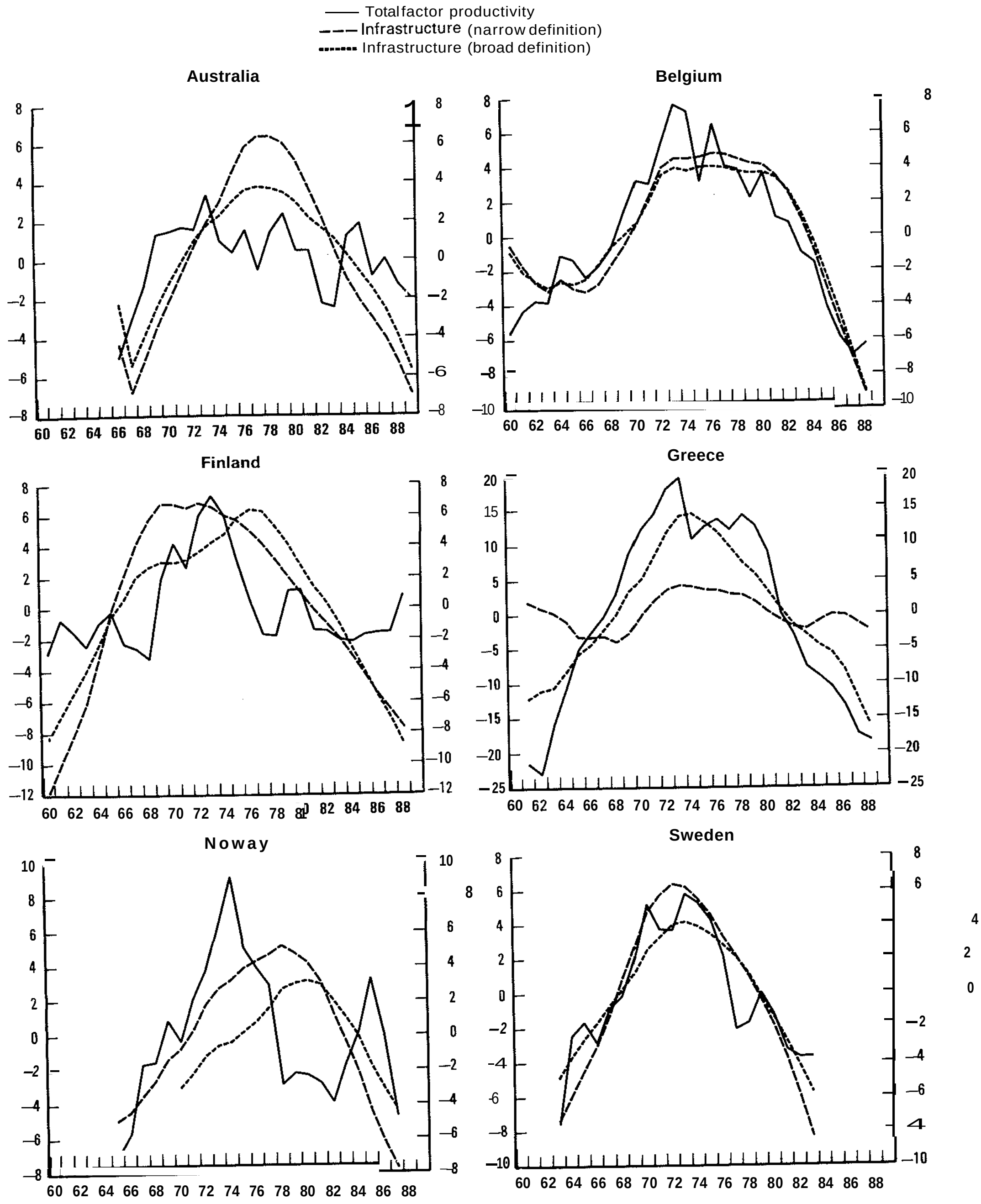
• With Cochrane-Orcutt correction for second-order autocorrelation.

Chart 1. Infrastructure and productivity (1)



1. All series detrended with linear time trends.

Chart 1. (cont.). **Infrastructure and productivity** (1)



1. All series detrended with linear time trends

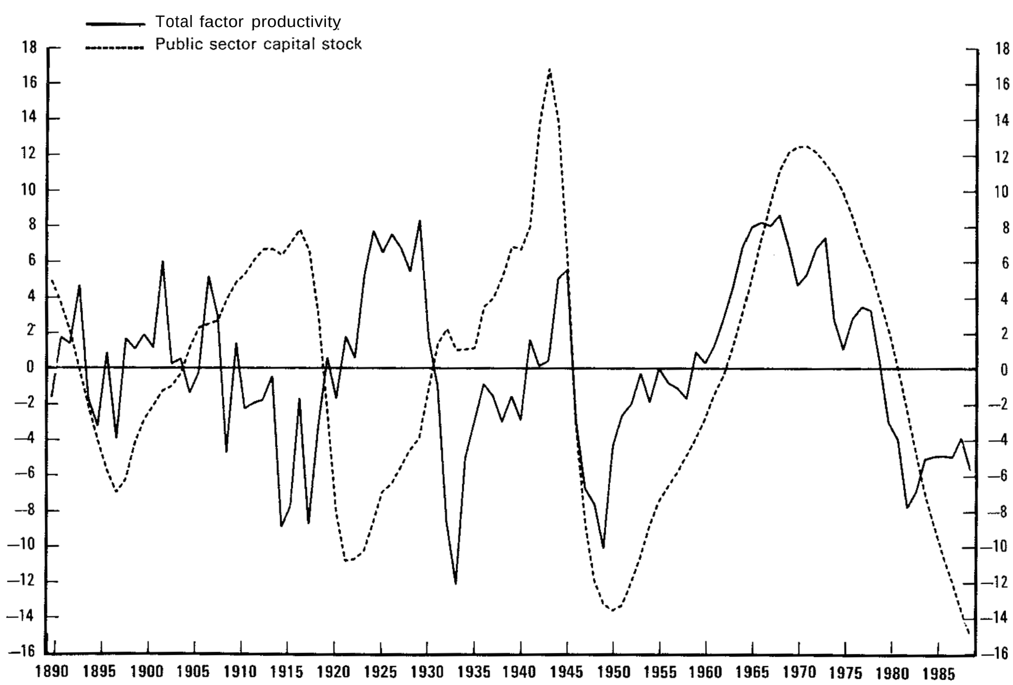
Table **3. Cross-country regressions**

The model: $\overline{D\,TFP} = a_0 + a_1\,\overline{D\,INF} + a_2\,\overline{D\,PIN}$[1]

	a_0 x100	a_1	a_2	$\bar{R}^2$	SEE
Narrow definition of infrastructure	1.16 (1.4)	0.24 (1.5)	–0.27 (–1.0)	0.06	0.81
Broad definition	0.0 (0.0)	0.44 (3.5)	-0.26 (–1.3)	0.48	0.57

1. See Note 1. in Tables 1 and 2 for the definition of the variables. The bar denotes the country-specific historical average growth rate of the variables.

Chart 2. **Infrastructure and productivity for the United States (1889-1989)** (1)



1. Both series detrended with piecewise-linear time trends.

A second data set, used in Chart 2, covers the period 1889 to 1987 for the United States only. Total factor productivity and public-sector capital stock data (corresponding roughly to the "narrow" definition of the first data set) are from Kendrick (1961), the Bureau of Labour Statistics and the Bureau of Economic Analysis.

III. THE RESULTS

Chart 1 shows the two definitions of infrastructure capital and TFP for the twelve OECD countries for which data are available. All series are in level form, but have been detrended with simple time trends. In all countries, except Greece, both measures of infrastructure are hump-shaped, peaking in the early-to-mid 1970s[3]. In about half of the countries – the United States, Japan, Germany, Canada, Belgium, Greece, Sweden and, perhaps, Australia (where infrastructure seems to lag significantly) – TFP has roughly the same pattern. In a nutshell, this contemporaneous pattern of rise and decline is the aggregate evidence that the productivity slowdown was due to a fall-off in the rate of infrastructure investment.

Regression results for eleven countries (capacity utilisation is unavailable for Greece before 1982) are shown in Tables 1 and 2. The first table shows the results with the narrow definition of infrastructure and the second with the broad one. All series are differenced, since preliminary co-integration tests indicated that level regressions were likely to be misspecified. Regressions were also corrected for second-order autocorrelation, although for most countries the Durbin-Watson statistics do not indicate such a problem. It is worth emphasising the importance of the capacity utilisation term in these regressions, even though the analytical focus is elsewhere. The residuals from regressions excluding this term (not shown) are, not surprisingly, highly auto-correlated. If this were due to truly autocorrelated residuals, applying an auto-correlation correction is appropriate. However, doing so results in the statistical insignificance of virtually all regressors for all countries. The apparent importance of capacity utilisation highlights the fact (which is evident from the charts) that the relationship between infrastructure and productivity is at frequencies much lower than that characteristic of business cycles.

Both types of infrastructure are a statistically significant (i.e. at the conventional 95 per cent confidence level) determinent of TFP in the United States, Germany, Canada, Belgium and Sweden whether the regressions are corrected for autocorrelation or not. Infrastructure is never significant for the United Kingdom, Norway and Australia, and is significant in only one of four regressions for France, Japan and Finland.

An important characteristic of any production function is its returns to scale. A standard assumption is constant returns to scale over private-sector inputs only, although this may be unreasonable if public-sector infrastructure has spillover effects[4]. Constant returns in this sense implies that the coefficient on PIN is zero. However, it is significantly different from zero except in Japan (except when the narrow definition is used and autocorrelation is not corrected), the United Kingdom (if autocorrelation is corrected), Belgium (if autocorrelation is not corrected), Australia, Finland and Sweden.

More generally, the point estimates from the regressions vary widely in terms of their implication for the marginal productivity of private-sector inputs. For the United States and Norway, the coefficient on PIN is about –1, implying that private-sector inputs have very little effect on output at the margin (or, that they have a strongly negative effect on productivity). Another way of making the same point is to compare the marginal products of capital – both private-sector and infrastructure – implied by the estimates. Consider the five countries for which infrastructure is statistically significant in all regressions[5] and take the point estimates using the narrow definition of infrastructure (Table 1), not corrected for autocorrelation. The implied elasticity of output with respect to private-sector capital (i.e. the sample average income share of capital multiplied by the coefficient on PIN) varies from only 0.05 in the United States to 0.4 in Belgium. The implied marginal product of private-sector capital (i.e. the elasticity multiplied by the average product of private-sector capital) in 1988 varies from 0.02 in the United States to 0.09 in Canada and Sweden (i.e. a unit increase in capital raises output between 2 and 9 per cent). The implied marginal product of infrastructure is 0.45 in the United States and 1.7 in Germany. This wide range of aggregate production structures is hardly plausible, given the fairly uniform level of development across OECD countries.

One problem with these regression is that there is really only one event – the productivity slowdown – and many possible explanations. However, if the country-specific correlation between infrastructure and TFP in the 1970s was just a coincidence, one would not expect any particular cross-country correlation between these two variables. Equation [2] was estimated on a cross-country basis using the sample-average rate of change of the variables[6]. The capacity utilisation term was omitted, as it explains only short-term fluctuations. The estimated elasticity of TFP with respect to infrastructure is large, but significant only for the broad definition of infrastructure (Table 3). It is worth noting that these cross-country regressions do not eliminate the possibility of reverse causation. That is, infrastructure investment would be higher in countries with higher TFP (and income) growth, even if the results are driven by the demand for, rather than the supply of, infrastructure.

Another way to bring more information to bear is to examine a much longer time-series for productivity and the public-sector capital stock, which is available for the United States. Chart 2 shows the detrended series. Visual examination of the raw series indicated that linear time trends are not plausible. Instead, piecewise linear trends were used, with kinks in 1929 and 1948. The post-war correlation discovered by Aschauer is clearly visible. However, the decline in the public capital stock appears to lag that in TFP, suggesting reverse causation. No systematic pattern is evident in the rest of the data, except the simultaneous rise in both series in the decade following 1933[7].

IV. CONCLUSIONS

To summarise the evidence presented in this note: infrastructure investment has a large estimated return in the United States and four other OECD countries; the estimates imply widely differing production structures from country to country; there is no evidence that infrastructure and productivity are related in the United States outside the post-WWII period; there is some cross-section evidence that countries with high infrastructure investment in the post-war period also have had high productivity growth.

The slowdown in infrastructure investment provides an intriguing possible solution to the puzzle of the post-war productivity slowdown. But, overall, the regression results suggest that the numerical estimates of the effect of infrastructure on productivity are not robust enough to support a policy recommendation of a sharp acceleration **of** infrastructure investment.

NOTES

1. On a quite separate issue, she also argues that current public investment decisions do not maximise the return, and that significant gains could be had by rationalising them.
2. Indeed, as will be seen below, any variable that is approximately a quadratic function of time is a likely candidate for explaining the productivity slowdown. Adding a trend to the regressions described below changes the estimated effect of infrastructure substantially, generally reducing it to zero. We have no economic interpretation for a quadratic trend, however.
3. The detrending emphasises the deceleration of the series while obscuring changes in their levels. Thus in some countries (the United States, for example) the infrastructure stock not only decelerated but actually declined. In others (Germany, for example) it decelerated, but continued to grow.
4. Constant returns to scale over private sector inputs means that output can be doubled if only private sector inputs (not infrastructure) are doubled. If this were the case, then it would imply that infrastructure is no "constraint" on private sector production – for instance, there is no highway congestion. But this would suggest that, at the margin, infrastructure is unproductive. An alternative assumption is constant returns to scale over all inputs. This can be tested by imposing the restriction that the coefficients on INF and PIN in equation [2] are equal but of opposite sign. The results vary widely according to country, to the definition of infrastructure and to whether autocorrelation is corrected.
5. These are the United States, Germany, Canada, Belgium and Sweden.
6. Aschauer (1990) and Munnell (1990*b*) report cross-section regression for the individual states of the United States. They found much smaller, though still significant, output elasticities for public-sector capital than have been typical in time-series regressions.
7. Regressions were also carried out using equation [2] in first difference, although, as no capacity-utilisation measure was available, we do not put much faith in the results. Nonetheless, they suggest that the infrastructure elasticity of TFP was negative (-.06) and insignificant (t=0.2), over the 1890-1929 period. They also confirm the visual impression of a positive (0.25) elasticity over the 1930-1948 period, although it, too, is insignificant.

Annex

DATA SOURCES

The private-sector output, employment and capital stock series, denoted GDPBV, ETB and KBV, are drawn from the OECD's *Analytical Data Base* (ADB).

Data for the constant-price infrastructure capital stocks, denoted INF.N (narrow definition) and INF.B (broad definition), are from the OECD's *Flows and Stocks of Fixed Capital,* except for the narrow definition for France and Japan, which was cumulated from ADB government-sector investment data. The narrow definition is the capital stock of "producers of government services". The broad definition includes, in addition, structures in transport and communication (except for Norway for which no data were available before 1977), and equipment and structures in electricity, gas and water (except for France for which series for the energy-sector capital stock are used). Neither definition includes the military capital stock.

The private-sector and infrastructure capital stock series are both gross concepts, except for Norway for which infrastructure refers to the net stock. For Canada, Germany and Sweden a one-time adjustment was made to the levels of private-sector infrastructure series in order to calculate consistent non-infrastructure private-sector capital stock series used in regressions reported in Table 2. This is because the base years for infrastructure capital stocks are different than for the other series. A similar adjustment was made for Norway because the best years were different and the infrastructure series are net of depreciation while private-sector capital stock series are gross.

The capacity utilisation series (CU) refer to the manufacturing sector only and are drawn from the OECD's *Main Economic Indicators.*

In the tables, GDPBV, KBV, INF.N, INF.B are measured in billions of local currency units; ETB is measured in ten-thousands of employees.

Table AI. United States

	INF.N[1]	INF.B[1]	KBV[1]	GDPBV[1]	ETB	CU[2]
1956	1 130.6	1 849.5	2 381.9	1 246.8	5 781.6	86.1
1957	1 175.6	1 902.6	2 454.9	1 263.4	5 779.3	83.6
1958	1 224.7	1 956.5	2 505.2	1 248.2	5 576.1	75.0
1959	1 275.5	2 013.8	2 565.1	1 325.2	5 755.1	81.6
1960	1 327.6	2 071.6	2 627.9	1 352.8	5 818.5	80.1
1961	1 381.4	2 129.6	2 688.6	1 387.4	5 756.2	77.3
1962	1 436.8	2 188.7	2 757.6	1 464.2	5 840.0	81.4
1963	1 497.4	2 255.1	2 831.8	1 524.9	5 880.4	83.5
1964	1564.1	2 327.5	2 922.0	1 608.6	5 995.6	85.7
1965	1 633.8	2 406.5	3 041.2	1 703.3	6 173.9	89.5
1966	1 706.8	2 491.7	3 177.0	1 799.6	6 365.5	91.1
1967	1 783.0	2 582.2	3 306.9	1 844.7	6 393.0	86.8
1968	1 859.3	2 677.0	3 444.4	1 921.7	6 546.0	87.0
1969	1 929.8	2 768.1	3 595.4	1 967.2	6 755.8	86.7
1970	1 994.0	2 855.6	3 737.8	1 953.6	6 751.4	79.2
1971	2 057.6	2 941.9	3 871.0	2 009.6	6 757.0	77.4
1972	2 121.0	3 031.2	4 015.8	2 113.4	6 970.2	82.8
1973	2 180.4	3 119.8	4 197.6	2 229.1	7 253.0	87.0
1974	2 240.1	3 209.0	4 377.9	2 207.0	7 382.3	82.7
1975	2 295.1	3 284.9	4 513.3	2 165.5	7 185.3	72.3
1976	2 344.1	3 351.3	4 649.3	2 281.8	7 408.6	77.4
1977	2 388.0	3 416.1	4 813.8	2 397.0	7 723.1	81.4
1978	2 440.4	3 488.1	5 009.4	2 528.8	8 131.0	84.2
1979	2 482.5	3 549.6	5 222.7	2 593.6	8 447.2	84.6
1980	2 530.0	3 617.7	5 420.0	2 583.2	8 495.3	79.2
1981	2 571.0	3 678.2	5 624.5	2 643.5	8 598.5	78.3
1982	2 606.2	3 729.2	5 785.7	2 572.0	8 479.8	70.3
1983	2 644.0	3 778.7	5 932.7	2 674.4	8 564.8	73.9
1984	2 682.0	3 832.8	6 127.5	2 873.9	8 990.5	80.5
1985	2 727.0	3 904.6	6 348.3	2 973.5	9 240.6	80.1
1986	2 772.9	3 976.2	6 545.8	3 058.0	9 413.3	79.7
1987	2 824.2	4 049.7	6 731.5	3 167.8	9 685.5	81.0
1988	2 875.2	4 121.6	6 947.9	3 316.7	10 009.7	83.6
1989	2 929.2	4 182.5	7 158.2	3 400.8	10 262.6	83.9

1. **1982** prices.
2. **Rate of** capacity utilisation.

Table A2. Japan

	INF.N[1]	INF.B[1]	KBV[1]	GDPBV[1]	ETB	CU[2]
1962	39 311.1	*	75 371.0	62 106.9	4 197.1	*
1963	42 406.8	•	85 158.0	67 270.5	4 232.6	•
1964	45 948.1	•	96 105.0	75 830.9	4 287.7	•
1965	49 799.0	65 507.6	107 050.5	80 606.9	4 354.2	*
1966	54 446.4	71 977.1	119 242.8	89 794.1	4 455.8	•
1967	59 211.3	78 520.6	134 386.5	100 307.6	4 537.3	*
1968	64 964.2	86 365.8	153 203.0	114 043.6	4 616.7	91.1
1969	71 642.4	95 290.4	174 853.0	129 214.9	4 653.3	91.7
1970	79 641.1	106 503.2	201 425.3	144 335.2	4 700.2	89.4
1971	89 415.0	119 252.7	227 598.9	150 754.2	4 722.6	84.3
1972	100 769.3	134 374.8	255 684.7	164 118.5	4 709.2	84.8
1973	112 943.1	149 780.2	284 272.0	177 224.3	4 827.6	88.1
1974	123 730.8	163 631.0	310 333.5	175 025.9	4 791.9	80.7
1975	135 446.9	178 330.6	335 380.1	179 608.7	4 770.9	68.8
1976	147 392.8	192 912.1	358 297.0	187 002.0	4 819.5	74.4
1977	160 863.8	209 351.8	381 245.5	196 251.0	4 882.0	73.9
1978	176 652.2	228 257.7	404 147.6	206 127.1	4 936.4	76.7
1979	192 941.7	248 440.3	430 788.5	218 066.0	4 996.6	81.2
1980	208 328.9	267 451.6	458 278.4	225 734.2	5 048.8	81.2
1981	224 218.8	286 964.6	486 521.6	233 139.1	5 090.9	77.5
1982	239 817.9	305 995.9	513 125.8	241 471.4	5 147.2	75.2
1983	255 171.9	324 874.4	538 621.9	248 473.5	5 237.8	76.2
1984	269 857.3	342 336.1	566 647.9	259 706.2	5 264.9	80.7
1985	284 313.8	•	598 160.4	274 013.5	5 304.4	80.8
1986	299 702.8	*	630 720.0	281 710.2	5 353.4	77.1
1987	316 489.1	•	662 518.1	294 748	5 408.0	77.1
1988	334 403.6	•	699 896.3	314 466.4	5 509.9	81.6

1. 1985 prices.
2. Rate of capacity utilisation.

Table A3. Germany

	INF.N[1]	INF.B[1]	KBV[2]	GDPBV[2]	ETB	αß
1961	196.6	395.7	1 396.6	695.4	2 419.8	87.5
1962	206.7	419.1	1 497.8	726.6	2 417.0	87.3
1963	218.7	443.7	1 595.7	746.2	2 413.7	86.0
1964	233.6	472.1	1 702.5	795.4	2 406.3	87.8
1965	249.1	501.0	1 815.1	838.0	2 412.7	88.0
1966	264.2	528.9	1 923.3	862.4	2 396.7	85.5
1967	277.6	556.7	2 013.0	857.3	2 302.7	78.8
1968	291.0	584.6	2 105.6	912.2	2 302.3	84.8
1969	305.3	615.3	2 218.7	987.1	2 336.9	89.5
1970	321.7	651.0	2 350.5	1 037.6	2 358.2	91.0
1971	338.5	691.0	2 488.9	1 067.2	2 355.5	86.7
1972	354.5	732.8	2 621.9	1 112.7	2 351.0	85.1
1973	369.9	773.6	2 749.6	1 168.4	2 369.3	87.1
1974	387.6	816.2	2 852.5	1 164.1	2 325.5	82.5
1975	404.9	858.3	2 945.6	1 142.7	2 243.7	76.0
1976	421.6	897.6	3 042.9	1211.8	2 223.8	80.2
1977	437.5	934.3	3 146.4	1 244.9	2 224.1	80.2
1978	453.3	971.5	3 255.7	1 289.6	2 236.6	81.2
1979	469.7	1 008.8	3 376.2	1 343.9	2 270.5	84.7
1980	486.7	1 047.9	3 498.9	1 356.6	2 305.1	82.4
1981	502.4	1 084.2	3 608.4	1 355.0	2 296.0	79.0
1982	516.5	1 120.4	3 703.4	1 335.9	2 260.5	76.3
1983	529.0	1 154.8	3 802.7	1 362.3	2 219.7	78.4
1984	541.0	1 190.3	3 895.0	1 408.7	2 222.7	80.6
1985	553.0	1 225.1	3 995.3	1 434.8	2 237.1	84.3
1986	565.6	1 261.6	4 103.9	1 467.1	2 267.4	84.7
1987	578.6	1 298.0	4 218.6	1 489.5	2 282.4	84.3
1988	591.0	1 332.0	4 344.8	1 549.6	2 301.7	86.7
1989	603.8	•	4 489.8	1 614.3	2 336.2	89.1

1. 1980 prices.
2. 1985 prices.
3. Rate of capacity utilisation.

Table A4. France

	INF.N[1]	INF.B[1]	KBV[1]	GDPBV[1]	ETB	CU[2]
1963	624.0	*	2 616.4	956.9	1 670.5	*
1964	668.9	•	2 731.1	1 028.5	1 684.6	•
1965	719.5	*	2 847.6	1 083.5	1 683.8	*
1966	771.4	•	2 975.9	1 148.1	1 693.5	80.5
1967	826.7	*	3 112.7	1 209.8	1 694.5	79.5
1968	881.1	*	3 257.9	1 266.5	1 683.2	80.3
1969	938.5	•	3 430.4	1 365.7	1 703.5	83.9
1970	998.7	1 955.0	3 612.5	1 452.2	1 721.6	83.4
1971	1 059.1	2 044.6	3 813.0	1 528.2	1 723.4	83.5
1972	1 120.1	2 135.3	4 025.1	1 602.5	1 729.3	84.1
1973	1 183.9	2 230.2	4 255.5	1 699.7	1 750.7	85.8
1974	1 249.9	2 331.3	4 475.2	1 757.5	1764.1	83.3
1975	1 322.8	2 439.6	4 658.2	1 746.3	1 735.5	72.2
1976	1 397.4	2 548.8	4 854.9	1 826.8	1744.8	78.7
1977	1 462.9	2 651.8	5 039.7	1 890.3	1 755.0	79.2
1978	1 524.9	2 753.6	5 219.1	1 957.4	1 752.1	79.9
1979	1 588.4	2 860.9	5 398.3	2 028.3	1 750.0	81.3
1980	1 653.5	2 976.4	5 585.9	2 064.9	1 748.7	81.5
1981	1 720.2	3 088.6	5 753.3	2 086.5	1 732.7	77.6
1982	1 789.6	3 200.6	5 912.9	2 139.4	1 720.2	77.6
1983	1 853.9	3 302.4	6 050.7	2 148.7	1 703.2	77.2
1984	1 916.0	3 395.2	6 173.6	2 176.5	1 675.4	78.3
1985	1 984.8	3 494.2	6 303.0	2 214.7	1 657.2	79.4
1986	2 054.7	3 589.3	6 445.0	2 274.3	1 654.5	79.0
1987	2 125.7	3 686.2	6 600.5	2 333.0	1 658.3	80.0
1988	2 201.1	3 783.6	6 787.6	2 444.5	1 673.2	82.8
1989	2 279.8	3 883.0	7 000.5	2 553.9	1 696.6	85.2

1. 1980 prices.
2. Rate of capacity utilisation.

Table A5. United Kingdom

	INF.N[1]	INF.B[1]	KBV[1]	GDPBV[1]	ETB	CU[2]
1961	22.9	187.9	395.8	148.4	2 081.9	*
1962	24.4	197.7	410.5	150.9	2 086.7	*
1963	26.0	208.1	425.3	157.1	2 085.2	*
1964	27.9	219.2	442.6	166.7	2 110.8	*
1965	30.1	230.8	462.6	172.0	2 124.9	*
1966	32.3	243.2	483.3	174.9	2 118.7	*
1967	34.9	257.0	504.1	178.6	2 070.3	*
1968	37.9	271.3	525.7	186.8	2 049.3	•
1969	41.0	286.6	546.7	191.6	2 043.9	•
1970	44.7	303.3	569.0	195.3	2 027.2	*
1971	48.3	321.1	590.0	198.1	1 981.2	•
1972	51.9	338.6	609.7	203.3	1 982.1	33.8
1973	55.7	355.8	631.1	219.7	2 018.1	53.5
1974	59.1	371.5	650.6	216.4	2 024.0	40.3
1975	62.2	385.8	670.0	212.1	1 979.8	28.0
1976	65.4	399.6	689.4	217.9	1 952.2	25.3
1977	67.6	412.3	709.6	224.7	1 958.4	32.3
1978	69.6	424.9	729.7	232.4	1 977.3	34.8
1979	71.7	437.7	750.8	239.4	2 001.3	42.3
1980	73.6	450.3	770.8	234.7	1 979.4	26.3
1981	75.3	462.1	784.9	232.2	1 896.2	19.5
1982	77.7	474.8	799.1	237.0	1 855.2	23.3
1983	80.1	488.1	813.1	247.1	1 839.2	28.8
1984	82.8	502.3	830.1	252.2	1 879.7	41.0
1985	85.7	517.0	848.5	263.3	1 902.8	47.8
1986	89.0	533.3	864.8	274.1	1 903.0	48.0
1987	92.2	550.1	883.0	287.7	1 948.5	53.8
1988	95.3	565.4	908.3	301.4	2 026.8	67.8

1. 1985 prices.
2. **Firms operating** at full capacity.

Table A6. Canada

	INF.N[1]	INF.B[1]	KBV[2]	GDPBV[2]	ETB	CU[3]
1960	104.0	199.8	251.8	116.9	498.7	•
1961	109.5	208.9	260.8	120.1	504.1	*
1962	115.4	217.3	269.6	129.5	517.6	87.2
1963	121.1	225.9	279.1	136.8	528.9	89.3
1964	127.0	235.6	291.2	147.0	548.6	93.5
1965	133.5	245.8	305.6	157.9	569.9	96.0
1966	140.9	257.4	323.5	169.6	602.9	94.5
1967	148.4	269.1	340.2	173.8	617.4	89.5
1968	155.7	280.7	355.8	183.0	623.3	90.0
1969	162.8	292.4	371.6	192.8	639.1	91.8
1970	170.0	305.0	388.2	197.2	641.2	84.9
1971	178.4	319.8	405.2	208.4	649.1	85.5
1972	186.8	334.7	422.2	221.7	668.7	89.0
1973	194.9	349.9	442.0	240.8	704.5	94.6
1974	203.2	365.1	463.5	251.7	734.0	93.7
1975	211.7	381.9	487.8	256.0	735.8	82.6
1976	219.5	397.9	511.6	274.3	753.1	86.3
1977	227.2	414.5	535.9	284.0	762.8	87.1
1978	234.6	430.9	560.8	298.7	794.1	89.4
1979	241.6	447.0	590.4	312.7	837.1	90.4
1980	248.6	462.7	625.8	316.6	863.0	84.2
1981	256.1	481.4	666.7	328.2	885.0	83.3
1982	263.9	501.1	699.0	314.6	843.1	70.8
1983	271.4	518.7	726.2	324.5	841.5	74.7
1984	279.3	534.9	752.5	348.2	865.8	85.3
1985	287.7	551.2	781.4	366.2	889.1	87.7
1986	296.1	567.2	811.3	379.1	915.5	85.5
1987	305.7	585.3	845.5	395.1	941.4	85.9
1988	315.9	606.1	888.2	414.3	975.9	87.2
1989	327.4	630.2	932.7	427.4	995.6	85.4

1. 1981 prices.
2. 1986 prices.
3. Rate of capacity utilisation.

Table A7. Australia

	INF.N[1]	INF.B[1]	KBV[2]	GDPBV[2]	ETB	CU[3]
1966	83.3	153.6	221.0	81.9	431.7	45.3
1967	83.9	153.7	233.9	87.3	442.6	48.8
1968	88.1	161.1	247.9	92.9	453.2	50.0
1969	92.5	168.8	262.4	100.1	467.8	54.8
1970	96.8	176.5	278.0	105.8	486.5	54.5
1971	101.4	184.3	295.0	109.9	490.6	43.8
1972	106.1	192.4	309.9	113.6	495.7	35.5
1973	110.8	200.2	325.0	122.3	519.1	56.5
1974	115.6	207.7	339.9	123.2	523.5	42.0
1975	121.1	216.0	353.7	122.8	507.0	25.0
1976	126.7	224.4	367.1	128.0	512.8	25.3
1977	131.5	232.0	380.3	128.0	511.4	29.0
1978	135.7	239.4	394.8	132.8	507.1	31.3
1979	139.6	246.6	409.6	139.0	517.8	40.5
1980	142.8	253.4	425.4	142.3	533.6	42.5
1981	145.4	259.6	444.9	148.2	546.0	44.8
1982	147.8	266.5	464.5	147.0	541.6	26.5
1983	150.1	273.7	480.7	146.9	524.4	21.8
1984	152.5	280.3	497.5	159.1	542.0	38.8
1985	155.7	286.8	517.4	167.2	558.6	44.8
1986	159.2	293.6	536.3	170.8	581.7	38.5
1987	162.7	300.0	556.4	179.1	596.2	44.3
1988	165.8	305.3	578.3	186.3	623.8	45.0
1989	168.5	310.0	604.2	196.4	657.7	22.0

1. 1984/85 prices.
2. Firms operating at **full** capacity.

Table A8. Belgium

	INF.N[1]	INF.B[1]	KBV[2]	GDPBV[2]	ETB	CU[3]
1960	1 447.9	2 240.8	3 898.6	1 615.7	306.3	*
1961	1 480.0	2 300.7	4 052.2	1 700.5	308.6	•
1962	1 516.3	2 376.1	4 237.1	1 789.0	312.4	*
1963	1 560.7	2 457.9	4 419.3	1 851.9	313.6	•
1964	1 625.4	2 561.2	4 594.6	1 986.4	317.6	•
1965	1 671.8	2 655.9	4 788.4	2 048.4	317.9	*
1966	1 726.2	2 765.6	5 023.2	2 102.9	317.8	82.2
1967	1 793.8	2 896.2	5 261.7	2 183.0	315.1	78.1
1968	1 875.6	3 038.1	5 483.2	2 282.3	314.2	79.3
1969	1 960.9	3 175.3	5 722.2	2 436.0	319.8	86.2
1970	2 054.8	3 321.7	5 991.2	2 598.5	319.5	86.2
1971	2 159.3	3 493.8	6 282.9	2 701.5	321.0	84.3
1972	2 271.4	3 682.8	6 572.8	2 856.4	318.8	82.8
1973	2 361.7	3 838.9	6 880.4	3 042.3	320.8	84.8
1974	2 442.2	3 979.4	7 213.1	3 176.2	325.2	83.2
1975	2 528.2	4 141.2	7 525.7	3 101.3	316.6	72.0
1976	2 620.6	4 301.4	7 814.4	3 286.8	312.4	75.5
1977	2 709.0	4 462.6	8 093.5	3 297.0	309.5	73.0
1978	2 794.3	4 623.9	8 370.2	3 380.8	306.8	73.3
1979	2 882.8	4 796.7	8 654.6	3 437.2	306.7	77.3
1980	2 978.9	4 983.0	8 960.8	3 589.6	304.8	76.2
1981	3 062.1	5 158.3	9 236.5	3 549.5	297.1	75.1
1982	3 135.4	5 314.7	9 505.4	3 605.0	291.6	76.1
1983	3 194.8	5 446.2	9 743.7	3 626.7	288.6	75.7
1984	3 243.2	5 560.6	9 995.7	3 704.6	287.1	76.8
1985	3 284.3	5 661.4	10 241.8	3 730.8	287.9	79.2
1986	3 324.2	5 752.6	10 503.1	3 785.3	288.4	78.5
1987	3 368.9	5 837.4	10 774.7	3 902.2	292.4	78.1
1988	3 416.7	5 930.2	11 122.4	4 097.5	296.6	79.0

1. ***1985*** prices.
2. **Rate of** capacity utilisation.

Table A9. **Finland**

	INF.N[1]	INF.B[1]	KBV[1]	GDPBV[1]	ETB	CU[2]
1960	79.1	130.8	307.0	96.7	194.8	*
1961	84.5	138.9	325.1	104.3	197.9	*
1962	90.2	147.5	342.0	107.4	196.4	*
1963	96.4	156.6	356.5	110.6	196.4	*
1964	103.9	166.6	372.8	116.4	195.5	•
1965	112.2	177.5	391.6	123.1	197.5	*
1966	120.2	187.9	411.4	125.3	196.6	41.8
1967	128.5	199.5	429.5	128.0	192.2	39.0
1968	136.9	210.2	445.1	129.8	187.8	30.0
1969	144.9	220.7	464.7	143.2	189.7	39.0
1970	151.8	230.9	488.5	154.6	193.2	52.8
1971	158.7	242.1	513.6	157.4	190.9	40.0
1972	166.8	254.7	538.6	170.1	191.8	45.8
1973	174.3	268.2	567.5	181.5	194.5	61.8
1974	181.6	282.2	596.7	186.3	193.7	63.0
1975	189.7	298.4	628.9	187.0	191.2	33.8
1976	197.3	314.0	655.1	185.9	186.1	15.8
1977	205.0	328.3	676.8	184.9	180.5	11.8
1978	212.6	340.2	692.6	188.2	176.9	14.8
1979	220.3	352.1	709.4	203.1	180.3	35.3
1980	228.4	363.4	730.4	214.6	185.5	45.0
1981	236.8	375.2	752.2	216.9	186.0	37.3
1982	245.8	388.5	774.2	224.7	186.2	20.3
1983	255.2	401.3	798.0	231.3	185.8	25.0
1984	264.2	413.2	820.1	238.8	185.6	44.0
1985	273.5	426.0	844.1	247.0	184.1	39.8
1986	283.0	439.0	868.9	254.3	182.1	37.0
1987	293.4	452.7	896.1	262.6	181.2	44.5
1988	304.1	465.8	926.3	278.2	180.6	52.5

1. 1985 prices.
2. Firms operating at full capacity.

Table A10. Greece

	INF.N[1]	INF.B[1]	KBV[1]	GDPBV[1]	ETB
1961	9.8	80.6	169.8	116.5	323.9
1962	10.0	86.0	180.2	118.1	317.7
1963	10.2	91.2	192.0	130.8	311.8
1964	10.4	98.4	208.9	142.7	307.0
1965	10.5	106.6	229.0	157.3	303.9
1966	10.8	114.1	249.4	167.5	300.2
1967	11.1	122.9	270.4	177.6	296.0
1968	11.3	132.7	295.7	190.8	292.1
1969	11.8	144.8	326.4	211.7	290.8
1970	12.5	155.5	358.1	230.3	290.3
1971	13.1	169.6	395.1	248.3	291.1
1972	13.7	185.3	435.2	271.7	292.0
1973	14.2	200.4	481.8	292.4	294.2
1974	14.6	212.1	521.6	280.1	293.9
1975	15.0	221.1	554.2	297.9	293.5
1976	15.4	229.9	589.0	317.5	296.1
1977	15.7	237.5	625.5	328.0	297.5
1978	16.2	244.9	663.6	351.3	298.3
1979	16.5	254.1	707.4	364.7	301.1
1980	16.7	261.7	750.5	371.6	305.6
1981	17.0	269.2	789.7	371.2	322.5
1982	17.3	277.5	827.4	371.8	318.6
1983	17.8	288.9	858.9	372.2	321.2
1984	18.5	300.1	885.4	382.7	321.9
1985	19.2	313.4	913.4	393.7	323.4
1986	19.8	322.3	932.6	399.1	324.2
1987	20.1	326.2	945.6	396.7	323.5
1988	20.5	330.9	961.4	413.8	328.9

1. 1970 prices.

Table AI 1. **Norway**

	INF.N[1]	INF.B[1]	KBV[2]	GDPBV[2]	ETB	CU[3]
1965	105.4	•	225.4	159.4	126.2	*
1966	111.6	•	247.2	165.9	126.6	*
1967	118.7	*	269.2	176.4	126.3	•
1968	126.2	•	289.2	179.8	126.0	•
1969	134.6	*	309.2	188.2	126.4	•
1970	142.8	225.1	331.0	191.7	128.2	•
1971	152.0	237.5	355.9	200.6	128.3	*
1972	162.6	251.0	377.8	208.2	128.8	•
1973	172.9	264.1	400.7	216.8	128.2	•
1974	183.1	276.8	427.5	228.3	129.1	48.3
1975	194.3	291.4	456.9	224.7	130.1	31.8
1976	205.6	306.6	488.6	233.0	134.9	31.3
1977	217.4	323.3	525.5	237.5	136.4	30.3
1978	230.3	341.9	566.4	231.9	138.7	26.3
1979	241.6	358.8	605.8	236.3	137.5	30.8
1980	253.2	376.1	643.3	238.3	136.1	34.3
1981	263.9	392.5	686.8	244.6	138.2	27.5
1982	273.2	407.0	727.4	244.5	137.1	19.5
1983	282.9	421.5	764.2	249.5	134.1	18.0
1984	292.8	436.1	801.4	258.8	134.7	25.8
1985	301.7	448.7	836.3	273.0	136.1	29.8
1986	312.3	463.2	879.3	277.9	142.1	32.5
1987	324.1	478.5	920.2	274.2	145.7	33.5

1. 1984 prices.
2. 1985 prices.
3. Firms operating at full capacity.

Table A12. Sweden

	INF.N[1]	INF.B[1]	KBV[2]	GDPBV[2]	ETB	CU[3]
1963	149.3	301.9	865.4	357.1	318.5	*
1964	159.6	319.9	896.6	382.2	315.9	68.0
1965	170.4	338.5	935.9	396.6	317.7	72.0
1966	182.0	357.7	981.5	403.2	318.5	60.0
1967	194.9	378.2	1 025.1	414.8	310.7	53.8
1968	209.5	399.9	1 063.9	427.2	310.1	52.8
1969	224.8	422.8	1 106.8	447.0	309.6	67.5
1970	241.5	448.8	1 157.3	474.3	310.6	70.0
1971	256.7	473.3	1 204.2	472.3	304.5	49.0
1972	271.9	499.2	1 257.9	480.8	301.3	45.3
1973	285.8	523.5	1 312.3	501.4	299.5	57.3
1974	298.8	546.7	1 375.5	515.0	301.6	66.5
1975	311.7	569.9	1 434.5	526.5	304.5	40.3
1976	323.9	592.9	1 492.3	523.7	300.9	32.0
1977	337.3	616.7	1 541.3	508.8	297.2	25.5
1978	350.9	639.5	1 577.1	515.6	293.0	29.3
1979	364.4	660.8	1 615.4	535.9	293.6	42.3
1980	377.8	683.5	1 662.4	540.4	293.4	43.0
1981	390.5	706.1	1 705.0	537.1	290.9	27.0
1982	402.1	728.9	1 747.9	542.8	288.7	22.5
1983	413.3	751.6	1 793.7	553.5	288.3	30.8

1. 1980 prices.
2. 1985 prices.
3. Firms operating at full capacity.

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