Return to devalued drachma, cost-push inflation and international competitiveness

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Abstract
This paper presents empirical estimates of the effects of a return to devalued drachma on the cost-inflation rate in the Greek economy. The results show moderate effects and the potential for substantial improvements in the balance of goods and services.

1. Introduction

At the end of 2009, the Greek economy experienced serious internal and external imbalances. Large 'twin deficits' on the budget and current accounts (12% and 10% of GDP, respectively, in 2010), high public debt and net international investment position ratios (145% (103%) and − 98% (− 44%) of GDP, respectively, in 2010 (2000)), negative net national savings (17% of net national disposable income in 2010, and, with the exception of the year 2001, they were negative in each year of the period 2000-2010), high ratios of gross (net) profits to wages (130% (100%) in 2010, and the average value of the period 2000-2010 is 149% (118%)) and unemployment (12% in 2010 and 18% in August 2011) are the current problems of the economy. The exit of Greece from the Eurozone, and the reintroduction of drachma, is viewed by some scholars as the catastrophe of the economy and by others as its salvation. It may be argued, however, that the 'number one' problem is the lack of international competitiveness, whilst all the other problems constitute epiphenomena ([1], [2]). So, the 'late-2000s financial crisis' was not the 'cause' but rather the occasion of the 'Greek crisis'.

Within the Economic Monetary Union (EMU), the division of labour <u>tends</u> to be governed by the 'law of absolute (and not comparative) advantages', since there is (i) deactivation of trade (tariff and non-tariff) policies; (ii) a single currency; (iii) free movement of money capital; (iv) free movement of labour force; and (v) the so-called 'Stability and Growth Pact' ([3], [4, ch. 9], [5, chs 6 and 20] and [6] to [8]).

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Consequently, the national economies (and/or the regions of certain national economies), which are characterized by a low productivity, will eventually not be able to produce any commodity (setting aside the non-tradable commodities) or, in the best-case scenario, will produce only certain commodities (i.e. 'unskilled labour-intensive' commodities).[1] All the available empirical data suggest that this tends to be the case for the Greek economy (e.g. [10, chs 2 and 4]). Therefore, under the present circumstances, i.e. within the EMU, the contemplation of internal devaluation policies, such as reduction in government expenditures and cuts in unit labour costs in the private sector, seems to be the only available, although too little too late 'remedy'.[2]

The only purpose of this short paper is to present empirical estimates, by means of simple dynamic input-output price models, of the effects of a return to devalued drachma on: (i) the cost-inflation rate; and (ii) the balance of goods and services.[3]

2. Empirical estimates

Based on the most recent (2005) Symmetric Input-Output Table (SIOT) of the Greek economy (which describes 59 product/industry groups), we have constructed three, alternative, simple dynamic price models (see also ([13] to [16, pp. 145-147]). All the models have the same structure, which is imposed by the available SIOT (it provides no data on fixed capital stocks, non-competitive imports and sectoral employment), but they are based on different assumptions about the response of sectoral gross value added to currency devaluation (for a critique of this approach, see [17]).[4] Moreover, given that the international competitiveness of the economy has declined by 30%

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[1] Flassbeck and Spiecker [9, p. 183] note: 'Absolute and accumulating advantages of one country or a group of countries over a similar country or a country group are unsustainable. A huge gap in competitiveness has to be closed, because otherwise the country or region will face a situation where it cannot credibly convince its lenders that it will ultimately be able to pay back its debt.' (emphasis added).

[2] Panico [11, p. 2] indicates that '[t]he data on labor compensation and productivity however suggest that the weakness of these countries [Greece, Spain and Portugal] comes from the international specialization of their economy, rather than from the 'faulty management' of the labor market. […] This interpretation implies that the loss of competitiveness shown by some EMU economies requires structural industrial policies, rather than reductions in labor compensation, to be corrected.'.

[3] Kalman [12, p. 18] stresses: 'It is well to bear in mind also (to rub in some conventional wisdom from the system field) that in the economics problem under discussion a simple and reliable answer may be expected only if it were true that the effect of exchange-rate change on domestic price level is loosely coupled to the rest of the economy. If a phenomenon is loosely coupled then we are in the classical-science situation area and there is no problem. (Very probably the problem has been solved already.) But, on the other hand, if the phenomenon is not loosely coupled, then we have a system-determined problem with all its attendant difficulties.'.

[4] These models have been formed and applied in [18], and the findings were consistent with empirical evidence on the rate of cost-inflation in the first year after the last drachma devaluation (by 14%) in March 1998 (the estimated values were in the range of 1.16%-1.75% and the 'actual' one was almost 1.2%).

since 2001 (in accordance with estimates of the Bank of Greece; e.g. [10, ch. 2]), we suppose a drachma devaluation of 50%.

The application of our models gives the results summarized in Tables 1 and 2 (for the analytical results, and their evaluation, see [19]). Table 1 is associated with the model that gives the highest rates of cost-inflation, and reports (i) the industries that exhibit the three largest and the three smallest price increases after the devaluation; and (ii) the relevant price evolution (before devaluation, i.e. at the 'year zero', all prices are, by construction, equal to 100 drachmas).

Table 1. The post-devaluation largest and smallest price increases

	Industries most affected			Industries least affected		
Year	Coke, refined petroleum products & nuclear fuels	Water transport services	Motor vehicles, trailers and semi-trailers	Education services	Products of forestry, logging & related services	Real estate services
1	136.7	122.5	121.5	101.1	100.3	100.7
2	141.9	130.9	128.3	106.3	103.7	102.8
3	143.4	134.7	132.0	112.1	108.2	105.8
4	144.3	137.1	134.7	117.3	112.9	109.1
5	145.0	138.9	136.7	121.7	117.4	112.6

Table 2 is associated with the three models and reports the evolution of the per-period cost-inflation rate (as measured by the gross value of domestic production). It then follows that, for the first year after the devaluation, the international competitiveness of the Greek economy (as measured by the real exchange rate) increases between 37.2% and 42.4%. Finally, since (i) the elasticity of export volume with respect to the real exchange rate is in the range of 0.60 to 0.71, whilst the relevant elasticity of import volume is in the range of – 0.90 to – 0.92 (in accordance with estimates of the IMF and the Bank of Greece; e.g. [20, p. 10]); (ii) for the year 2010, the exports (imports) of goods and services are 48.2 (67.7) million Euros; and (iii) the international competitiveness increases by, say, 37.2%, it follows that the deficit of the balance of goods and services decreases between 89.5% and 99.4%.

Table 2. The per-period cost-inflation rates

Year	Model I	Model II	Model III
1	5.31%	5.31%	9.29%
2	1.59%	3.84%	5.96%
3	0.51%	2.99%	4.27%
4	0.16%	2.44%	3.26%
5	0.05%	2.06%	2.58%

3. Concluding remarks

Using simple input-output price models, it has been estimated that a drachma devaluation of 50% does not imply, directly or indirectly, great inflationary 'pressures', as is commonly believed, and in fact could directly increase the international competitiveness of the economy by about 37% and decrease the deficit of the balance of goods and services by about 89%. It need hardly be argued that, even if we overlook the limitations of the used framework, these findings <u>per se</u> cannot provide support neither to those who argue for the switch to the drachma, nor to those who argue against (e.g. [21], [22] and, respectively, [23, pp. 37-40]). However, they would seem to be useful for (i) a comparative evaluation of the painful process of internal devaluation, which is in progress; and (ii) the case where Greece leaves, in one way or another, the Eurozone. Finally, it should be noted that there are good theoretical generalizations of the present models ([24] to [27]) that integrate the price and quantity sides and, therefore, could offer more reliable estimates, provided that the required data are available.

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