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## COMMITTEE FOR ECONOMIC AND MONETARY AFFAIRS

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### After the cash changeover

Jean-Paul Fitoussi

#### Economic outlook

Current forecasts for Europe are currently grounded on a compromise between two alternative hypothesis, which I will describe in a stylised way.

According to the first which may be called *the big economy assumption*, the European economy not being poisoned by structural disequilibria – the huge private sector deficit (about 5% of GDP) which characterises the American economy as a consequence of past overinvestment – should soon rebound in such a way that the prospect for 2002, and in a greater extent for 2003, will be rather bright. After all, one of the benefit rightly expected from the creation of the euro is that it transforms a collection of small and medium sized economies into one big economy arithmetically less open to trade and enjoying thus a greater degree of autonomy.

According to the second that I propose to term the *fluctuat, nec mergitur* assumption, the European economy will recover only as a consequence of the recovery of the US economy (and thus of other parts of the world). Look at the growth rate in America, you will then be able to deduce the one in Europe. For reasons which will be explained latter, Euroland is supposed to have no growth autonomy and its economic activity follows suit that of the rest of the world. To understand why this second assumption is a bit artificial, assume that the world is composed of two big economies and ask the question: how one of this economy may recover if the other has not already recovered? The answer is that it exists only one possibility, simultaneous recovery. The rationale for this second assumption is that Europe follows a “passive” economic policy which means a combination of a “soft” monetary policy – more *ex post* than *ex ante* decreases in interest rates – and of a fiscal policy where only automatic stabilisers are allowed for. For example the real rates of interest are clearly positive in the Euro area (between 1.5 and 2%) and negative in the US. The fiscal impulse in the US represents so far 2% of GDP, and another one per cent is discussed currently by the congress. The expected balance of the federal budget will pass from a surplus of .7% of GDP to a deficit of about 2.5%, when in Europe we are still discussing of the need to put some limit to the play of automatic stabilisers.

If we combine the two hypothesis we are led to the conclusion that in Europe both the slowdown of growth and the recovery will be mild as compared to the US. In effect

the up and down of the “autonomous economy” will propagate to Europe but in an attenuated way, because Euroland is a big economy with a low degree of openness. Hence the current forecasts for growth are of the following profile: 1.5% in 2001 and 2002; 3% in 2003, for the Euro area economy; 1% in 2001, 0.6% in 2002 and 3.9% in 2003 for the US economy.

As a recovery will show up soon, at the latest at the end of the present semester, but more probably already in the second term of this year – so the consensus view goes – market participants are not expecting a strong move from the ECB, at maximum a decrease of 25 basis points in February or March.

Most forecasters acknowledge that we should have only faint confidence in these forecasts, because of the exceptional circumstances which characterises the world economy since September 2001. Is the cash changeover in Euroland going to strongly influence these prospects? To answer this question, we will try to disentangle for expository purposes the macroeconomic from the microeconomic effects of the cash changeover.

### **The effect of the cash changeover: macroeconomics**

It is quite uncertain to assess the effect of the cash changeover on inflation and/or on demand. Leaving apart the question of the spending of mattress money, on which we know little because it depends on fiscal laws in each country and on the impact of the changeover on the hoarding behaviour of people, there is no macroeconomic theory which convincingly argues that a change in the unit of account affects economic behaviours. Assuming even that mattress money will be in great part spent before the end of the period of double circulation, it may well be reconstituted latter, so that say, by the end of the year 2002, mattresses in euro will replace mattresses in former European currencies. In effect, there is no *a priori* reason to believe that the preference system of hoarders depends on the specific currency in which they hold their money, unless we make the assumption of a lower degree of confidence *vis à vis* the new currency, which will be counterfactual.

Of course if the hoarding of money was in part “involuntary” and if fiscal measures decided to cope with the introduction of the euro allow to launder some of these funds, the proportion of mattress money in the total assets of the economy will permanently decrease, increasing thus the demand for goods and/or for other assets. A clear indication that a phenomena of this type is under way is that the demand for cash in the euro area has fallen by 22% (seasonally adjusted and six month annualised rate of change) in October 2001. There are also indications that holding of currency have been shifted into overnight deposits (ECB Monthly Bulletin, December 2001), so that it appears that the net effect on M3 will be very limited and not only because currency represents a very small proportion of M3. So the assumption that people are just substituting cash by saving deposits can’t be ruled out, but it implies that for unclear reasons people discover suddenly that there exist more productive forms of saving, or that new fiscal measures have been very amicable to the laundering of money. In what extent this portfolio reallocation will impact on short term interest rates?

In any case, it is difficult to know both the size of “involuntary hoarding”, and the extent to which new fiscal measures are permissive of laundering funds. A common presumption is that the phenomena would have very weak effects, if any, on global demand. It seems thus that the best prediction about the consequence of the changeover is that it may affect the time profile of both the inflation rate and consumption spending, but not their average level. One may object that a change in the time profile of a variable could have lasting real consequences. An exogenous increase in consumption in a given quarter may boost the economy, if entrepreneurs believe that at least part of it is permanent. It follows that expectations on the transitory or permanent nature of the consumption shock will matter. Only if entrepreneurs have static expectations will the transitory increase in consumption demand have lasting effects.

### **The effect of the changeover: microeconomics**

When we come to the behaviour of firms, we have to consider the fact that the cash changeover is not only a change in the unit of account, but also an exogenous real shock because it implies a change in the list of prices in markets characterised by imperfect competition. The type of imperfect competition which dominates the economy will then determine the overall effect on prices of the cash changeover.

In an imperfect competition environment prices are not frequently changed because for most firms, changing the list of prices constitutes a transaction cost. This phenomena accounts for a certain degree of “rational” price rigidity (See e.g. Stiglitz). There is thus a presumption that when the price list has to be changed at an exogenously imposed specific date and for all participants in the market at once, the change will include *now* price increases that firms were planning to implement at a latter date. (There is also the real cost of changing currency for the retailers: cash machines, time spent with the customers etc., but this cost seems to be of a second order of importance). In passing, that means that monetary authorities should not give too much importance to the instantaneous rate of inflation. During some times, say a year, headline inflation rates will not mainly reflect past inflation pressures, but rather pricing behaviour in an imperfect competition setting where all firms are constrained to change their prices at the same date.

If the market structure matters, it is because firms may take advantage of the imposed change for testing the elasticity of their demand, i.e. the robustness of their market shares. If firms act on the presumption that others firms will take advantage of the situation to increase their mark-up, each of them will follow suit on the assumption that the elasticity of the demand for their own product is lower than the elasticity of overall demand. It will be so, especially in customer markets where there exist a lasting relationship between firms and their customers. In such markets, firms know that an increase in the price of the good they sell will not lead to a significant decrease in their market share, at least for a while. One could object that in such markets, each firm will be eager to show to its customers that it is not going to take advantage of the changeover – but not knowing the elasticity of their demand, nor the behaviour of other firms, trying also to have a price list which will be readable in the new currency (*psychological prices*) and last understanding that changing the price list now will delay the moment where they can change it again, constitute strong incentives to

increase their mark-up. If the most frequent market structure is the customer market one, there is some presumption that for a period, mark-up will increase.

But if the market is rather of the type “oligopoly *à la* Cournot”, the simultaneity of price changes may well lead to a price war. In those markets the incentive may work exactly the opposite, firms being tempted to increase their market shares by lowering prices. Those markets are in effect characterised by a few big firms selling a rather “homogenous” product, so that firm demand elasticity is supposed to be high. The market for distribution may be taken as emblematic of this structure. People are not going in hyper surface because they are in a relation of confidence with the seller, but for price reasons. On the other hand, the marketing behaviour of firms operating in those markets is typically aimed at building some “loyalty” links between firms and their customers. Each of the big firms are, through advertisement efforts and in giving some advantages to regular customers, trying to “fidelise” goodwill. There is thus an element of customer market in the market for distribution. This element, which implies product differentiation, actually lower the price-elasticity of the demand addressed to each firm. May be the best assumption for this type of markets is that the cash changeover will not affect prices.

We have little empirical knowledge on the structure of markets in our economies, and thus about the overall effect of price setting behaviours in different types of markets. More empirical research is needed. But as the cash changeover is hopefully a non recurring event, the pressure for implementing such a research program is weak. It was in effect a unique laboratory experiment.

Of course, some have argued that whatever the effect of the cash changeover, it will be of a second order of importance *vis à vis* the effect of increased competition brought about by the easiness of price comparisons throughout Europe allowed for by the expression of prices in the same currency. But the increase in the degree of competition depends itself of several factors of which the expression of prices in the same unit of account is not probably the most important. And its full effect will probably show up in the long term.

### **Concluding remarks**

There are several factors which are at play to determine the future rate of inflation of which the more important seems to be the followings: the degree of slack in European economies, the evolution of food prices, the evolution of the price of oil and others primary products, and the effect of the cash changeover. The first three factors are clearly acting towards a sizeable decrease of inflationary pressures. As far as the cash changeover is concerned, its net effect on the instantaneous inflation rate is likely to be positive but reversed as time go on, so on balance, its influence on the inflation rate will be small. It could have been more important if the changeover happened in a period of buoyant growth.

In a sense the introduction of the euro in a period of a growth slowdown, has decreased the likelihood of a strong effect on prices. Hence the equation facing the ECB is not modified in any meaningful way by the effective introduction of the euro, provided one understands that the “information content” of the instantaneous inflation rate – as far as future inflation is concerned – will be, for a time, very weak.

