# Commentary

*T*illiam English provides an overview of the recent Group of Ten (G-10) "Report on Consolidation in the Financial Sector" (better known as the Ferguson report<sup>1</sup>), with a special focus on the effects of financial consolidation on U.S. monetary policy. On the one hand, because the G-10 report was published a few months ago, discussing his paper should be a simple task, considering how I was spared the stress afflicting some discussants when they receive a paper they might be unfamiliar with, typically a few hours before a conference. On the other hand, commenting on this paper is far from easy. The G-10 report was the result of a long process of preparation involving central banks and treasury officials from many countries. English's paper faithfully conveys the thrust of the report. As such, its content was carefully "filtered" by discussion among many parties and reflects a consensus view. This tends to leave little room for disagreement.

The English paper, in line with the report, distinguishes three possible effects of banking and financial consolidation: those on the *implementation* of monetary policy (that is, on the operations through which central banks affect money market conditions and the supply of central bank money), those on the *transmission* of policy, and those on the *environment* in which monetary policy operates. As English explains, the implementation of policy may be affected if bank consolidation significantly reduces the number of players in the money market. This could diminish the degree of competitiveness of this market and of the process through which central bank money is allocated. The transmission of monetary policy may be affected through changes in the mechanism of the passthrough of policy rates, through changes in the speed and extent of the pass-through of policy rates, and through changes in the relative importance of different channels, such as the lending channel or the interest rate channel. Furthermore, the monetary policy environment may change, for example, if cross-market or cross-country financial linkages are strengthened as a result of consolidation (such as concentration that increases herd behaviour in the financial market) or if the significance of certain monetary policy indicators, such as monetary aggregates, is reduced.

The general conclusion of the paper is that there is no evidence that the trend toward bank and financial consolidation observed in recent years in most industrial economies has significantly affected monetary policy. This conclusion is based on both an examination of the empirical evidence and surveys conducted among the participating central banks. First, although bank consolidation has indeed tended in many countries to reduce the number of active players in money markets and the number of counterparts of central bank operations, this does not appear to have affected money market competition in a significant way. Also, no distortions or inefficiencies in the allocation of central bank money have become apparent. Similarly, no significant effects on the functioning of securities markets and, hence, on changes in the impact of policy changes on the yield curve, have been

Ignazio Angeloni is deputy director general of research at the European Central Bank.

The author is grateful to Reint Gropp for useful discussion and help in preparing these comments. The views expressed are those of the author and do not necessarily reflect the position of the Federal Reserve Bank of New York, the Federal Reserve System, or the European Central Bank. detected. As to the effects on bank rates or the supply of credit, the paper correctly argues that the relevance of such effects for the transmission mechanism hinges, directly or indirectly, on the existence of a significant "lending channel" or "balancesheet channel" of monetary transmission. As is well-known, the empirical evidence on such effects is quite ambiguous. Finally, no convincing evidence is found to indicate that the monetary policy environment has been affected by bank consolidation.

Once again, I find little to disagree with the general message of the paper. The evidence is indeed ambiguous. Although one could make several theoretical cases for consolidation to impact monetary policy in a variety of ways, no conclusion can be drawn from the presently available empirical evidence. At the same time, one can argue, as English does, that since consolidation is a recent and ongoing phenomenon in many countries, monetary policy could eventually be affected in ways that are still difficult to discern. This could be true particularly in the Euro area, where important changes in the structure of the banking system have been triggered by the introduction of the single currency and are now actively under way. I will devote the remainder of my comments to the Euro area, presenting data that allow us to compare the cross-country patterns of bank concentration with the evidence available on the strength and timing of monetary policy transmission.

The table summarises these data. Specifically, the first two columns show, for selected countries, a measure of bank concentration—namely, the Herfindahl index calculated from the market shares in the deposit market and the growth rate of the Herfindahl index over the 1995-99 period.<sup>2</sup> The data indicate that bank concentration differs substantially across

Euro area countries. It ranges from very high levels in the smaller countries (Belgium, the Netherlands), where a limited number of banks exist, to intermediate levels in the larger countries (France, Spain, Italy), to very low levels in Germany, where the banking system is notoriously fragmented.<sup>3</sup> These data can be somewhat misleading in that they assume that the country's economy represents the relevant market for the national banking system; however, available empirical evidence suggests that in the Euro area this may still be the appropriate working assumption.<sup>4</sup> Furthermore, the table shows that there are also substantial differences in the speed of consolidation across countries. The data for the Euro area as a whole and for the United States tend to indicate that the banking sector in the Euro area is less concentrated, although not by very much.

The data on bank concentration can be compared with some summary statistics on the strength and timing of monetary transmission. The table also includes summary measures obtained from published sources, whenever comparable estimates exist. Columns 3 and 4 examine the passthrough of changes in money market rates to bank deposit and lending rates, respectively, measured by the effect of a 100basis-point change in the money market rates to the relevant bank rate, also measured in basis points.<sup>5</sup> It is worth noting that although significant cross-country differentiation exists in these measures, it is very hard to identify patterns that can be related to the measures of bank concentration in any insightful way. The lowest intensity of pass-through for both bank rates appears to characterise Spain, a country that is close to the median in terms of bank concentration. However, Germany, which stands at the lower extreme of bank concentration, is close to the median in terms of bank rate pass-through.

#### Bank Concentration and the Strength and Speed of Monetary Policy Pass-Through

Country/Area	Herfindahl Index (Deposits) 1998	Growth Rate of Herfindahl Index 1995-99 (Percent)	Three Months' Pass-Through to Deposits	Three Months' Pass-Through to Loans	Number of Quarters to Maximum-Output Effect of a Monetary Policy Shock	Maximum-Output Effect of a 100-Basis-Point Monetary Policy Shock
Belgium	130	84	0.61	0.55	4	1.1
France	75	35	NA	0.42	2	0.4
Germany	11	60	0.43	0.54	8	0.6
Italy	37	-10	0.43	0.58	4	0.2
Netherlands	248	-7	0.32	0.86	4	0.6
Spain	48	51	0.11	0.22	4	0.2
Euro area	6	15	0.35	0.53	5	0.4
United States	12	23	NA	0.74	7	0.7

Sources: Corvoisier and Gropp (2001a); Bankscope; Mojon (2000); Mojon and Peersman (2001); Borio and Fritz (1995); Christiano et al. (1999).

Focusing on the aggregate numbers for the Euro area and for the United States, one notes that the pass-through on lending rates in the United States<sup>6</sup> seems to be stronger than that for the Euro area average (data for deposits are not available on a comparable basis). This seems consistent with the idea that a higher bank concentration leads to stronger or faster passthrough, although it would clearly be hazardous to draw any conclusions from such limited evidence.

The last two columns of the table focus on the effect of monetary policy changes on real GDP. To this end, summary measures are reported for both the speed and the intensity of the effect of policy.<sup>7</sup> Speed is measured by the number of quarters it takes for the policy change to attain its peak effect on output. Intensity is measured by the size of the peak effect. Again, it is very hard to discern any consistent pattern in these data. For example, a slow and moderate effect of policy on output seems to characterise France, a country that is not far from the median value in terms of concentration.

The chart presents scatter plots of the Herfindhal index, as defined above, for the four measures of monetary transmission in the table. The panels illustrate the lack of an apparent crosscountry correlation pattern between the measure of concentration and the transmission of monetary policy.

Needless to say, this evidence is very crude and, even if taken at face value, could admit other interpretations. For instance, the lack of bilateral correlation in the panels could well be consistent with the existence of a consolidation effect on monetary transmission, if third factors were at play. As an example, there is some recent evidence that in the Euro area the contestability of banking markets may have increased with the advent of Internet banking.<sup>8</sup> If this were the case, the concentration measures used in the G-10 report would no longer be an adequate indicator of bank structures. Although no strong conclusion can be drawn, these measures are suggestive, as they confirm the conclusion by English (and by the G-10 report) that bank, or financial, consolidation does not seem to affect the transmission of monetary policy in a systematic way.

## Bank Concentration and Four Measures of Monetary Transmission



<sup>a</sup>Effect of a 100-basis-point shock to monetary policy.

### Endnotes

1. The report, published in January 2001, was prepared by a task force chaired by Roger W. Ferguson, Vice Chairman of the Board of Governors of the Federal Reserve System.

2. These data are drawn from Corvoisier and Gropp (2001a). Figures for the Herfindahl index are presented instead of market shares of the largest banks, as Herfindahl indexes will also reflect the ongoing consolidation among smaller banks, which may be particularly important in the larger Euro area countries.

3. It is useful to emphasise that the degree of competition and the degree of concentration in a market are only loosely related for any number of reasons. For example, although Germany appears fragmented at first sight, the country may in fact be much less competitive than these figures suggest. This is because virtually all of the very small banks in Germany are part of larger networks, within which markets are often divided regionally (see, for example, Ehrmann and Worms [2001]). This suggests that the many small banks may in fact not be competing fully with each other.

4. Corvoisier and Gropp (2001a). The reason for this ongoing fragmentation across Euro area countries largely seems to be differences in regulation.

- 5. For details on the estimation, see Mojon (2000).
- 6. Data are from Borio and Fritz (1995).
- 7. See Mojon and Peersman (2001) and Christiano et al. (1999).
- 8. Corvoisier and Gropp (2001b).

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