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Singh, Ajit

University of Cambridge

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NOTES ON PENSION REFORM IN TURKEY - AN INTERIM REPORT

by Ajit Singh, Professor of Economics,
University of Cambridge, Cambridge, England.

1. These notes constitute an interim report on the proposed pension reform in Turkey. The notes have been prompted by my reading of the papers on the subject sent to me by Mr. Schultz.

2. The papers I saw point towards the following conclusions.

First, the existing pension system in Turkey is in a total crisis and is no longer sustainable.

Second, the pensions crisis not only jeopardizes the old age pension entitlement of the Turkish citizens, it has a number of other harmful economic effects. It is, for example, thought to be a major contributor to the fiscal crisis of the Turkish state. The fiscal imbalance in turn leads to inflation and macroeconomic instability. All these also have negative consequences for long term economic growth.

Third, there is general agreement on a number of significant causes of the current difficulties of the pension system. The former include very early retirement age compared with other OECD countries, inadequate contribution levels, poor collection rates and importantly, the diversion of pension fund moneys by the government to finance fiscal deficits or to other activities yielding low returns. It is important to note that the pension problem in Turkey, unlike in other OECD countries, is not due to ageing of the population. As OECD (1995) observes, "for Turkey, this

problem is more distant, but with very short working life contributions, the system is actuarially insolvent, unless radical changes in entitlement and contribution rates are made."(page 68, footnote 53).

3. For these reasons, many responsible voices in Turkey call for the reform of the pensions system involving inter-alia the privatization of a considerable part of the pension provision through a fully-funded, contributory, mandatory segment. The general idea seems to be that it will be a three-tiered system, somewhat along Chilean lines. I do not know the full details of the specific scheme under discussion or its actuarial viability. However, these notes are concerned with some of the extra economic arguments used to justify a fully-funded private pension scheme.

4. A number of people, not just in Turkey, but also elsewhere (see the Economist's recent survey of Latin-American finance)[1], seem to regard the individual private contributory pension schemes as a solution for not just the crises of the pension system, but also as a panacea for a wide range of assorted ills which afflict their economies. Introduction of such schemes are supposed to raise national savings, enhance stock market development, reduce public sector deficits, promote macroeconomic stability and be generally conducive to steady economic growth. The main purpose of this note is to enter a dissent against this rose-tinted view of the general economic benefits of private pensions, with specific reference to Turkey.

5. As I follow the arguments in the papers I received from Mr. Schultz, one part of the debate so far has been concerned with the question of the capacity and the level of development of the Turkish stock market to be able to successfully absorb large privately-managed pension funds. Asli

[1] Economist, December 9 1995.

Demirguc-Kunt, the World Bank economist, argues that the record of development and growth of the Turkish stock market over the last decade shows that it is fully capable of responding to the pension challenge.

The view of the ILO documents I have seen seems to be that at its present stage of development, the Turkish stock market is not yet ready to absorb large-scale pension funds. However, it is recognized that important institutional changes are taking place which indicate that in the medium term the stock market will be able to shoulder the pensions burden.

6. What seems to me to be missing in these documents is an adequate discussion of the volatility of the Turkish stock market and the dangers that its enhanced role would, therefore, pose not just for the old age pension provision, but equally significantly for the broader economy. The following paragraphs analyse this question.

7. The accompanying tables provide comparative information on different aspects of the Turkish stock market. The comparator countries are, firstly, countries in the region (Egypt, Iran, Jordan, Morocco and Tunisia); secondly, other emerging markets elsewhere (Argentina, Columbia, India, Nigeria and Philippines); and thirdly the developed stock markets of Japan, the UK and the US. Greece is also included in these tables as it is one of the very small European stock markets.

These data show that although Turkey's stock market is bigger than that of Greece, it is much smaller than Jordan's in terms of market capitalization as a proportion of GDP (see Table 1). In relative terms the Jordanian market capitalization is more or less at par with advanced country markets. The size of the Turkish market however fares favourably with that of other emerging markets. Moreover its market capitalization has grown extremely rapidly from 2% to 30% of GDP

over the period 1983-1993.

Table 2 shows that although the number of listed companies on the Turkish stock market has not increased over the last decade, there has been an enormous increase in the traded value, from $7 million in 1983 to $23 billion in 1993. Average daily traded value rose from $0 .02 million in 1983 to $152 million in 1993. Table 3 shows that, like other Third World stock markets, the Turkish market is highly concentrated but it is not in any way remarkable in this respect.

8. The next two tables provide evidence on stock market volatility. The picture which emerges from these data in relation to Turkey is a disquieting one (see Table 4). Measured by the standard deviation of the percentage change in monthly prices, Turkey has by far the most volatile stock market of any country whether measured over the whole period 1983 to 1993, or over the sub-periods 1983-1988 and 1989-1993. Over the period as a whole, the Turkish market by this measure was 50% more volatile than the Mexican market - the next most volatile market in the table.

Table 5 reports on another aspect of volatility based on monthly changes in domestic currency prices for the period January 1987 to November 1994. The table shows the probability of large declines in prices which may occur in different stock markets. The idea here is that large price falls are much more de-stabilising for the rest of the economy because of their wealth effects and their impact on general confidence. The Table shows that Turkey had the highest probability of big declines in prices - of the order of 20 to 30 percent - over the reference period.

9. What are the reasons for and the consequences of the very high volatility of Turkish share prices? The reasons for volatility are not far to seek. These lie partly in the under-development of

the Turkish stock market. This under-development implies that Turkey does not as yet have the uniform accounting standards or information gathering or disseminating private or public organisations of the kind found in industrial countries. Consequently, one expects a priori that share prices in emerging markets like Turkey are likely to be dominated by "noise" and speculation. Secondly, as Tirole (1991) suggests, the fact that not many listed companies in these young markets will have a long enough track record, or sufficient time to establish reputations, will also tend to produce market volatility and arbitrary prices.

10. However, these considerations are general and apply to all emerging markets. These do not explain why, for example, Turkish stock market should display a degree of volatility which is 4 or 5 times as great as that of a regional comparator like Jordan. Clearly a major reason for stock market volatility in Turkey is the general macroeconomic instability of the Turkish economy. Turkey has by far the highest inflation rate in OECD countries over the last 5 years. Consumer prices rose at an average rate of 66.6 percent per annum in Turkey compared with 35.8 percent in Mexico, 16.6 percent in Greece and less than 5 percent per annum in most industrial countries. Similarly, table 6 shows that between 1980 and 1985, the Turkish Lira fell to a fifth of its value against the US dollar. It again fell to less than a fifth of its 1985 value over the next 5 years. After 1990, the rate of depreciation has accelerated and by the 4th quarter of 1994 the Lira had fallen to an eighth of its value compared to 1990. These fluctuations in nominal exchange rates and in the general price level lead to large changes in prices in other markets including the stock market.

11. Does the stock market volatility matter? This question was discussed at some length in my general background paper for this project, Singh (1995). the main points of that analysis can be summarised as follows: First, volatility does have obvious consequences for retirees. Workers nearing retirement are highly vulnerable to market shocks. As Allen and Gale (1995) note with

respect to the experience in the 1970s and 1980s of the relatively far more stable US economy: "Households that had provided for retirement by investing in the stock market and needed to liquidate shares in order to pay for consumption were forced to reduce their standard of living substantially. By contrast, in the 1980s the stock market approximately doubled in real value and the process was reversed; households whose savings were invested in the stock market were able to increase their consumption substantially. The important point is that these U.S. households bore substantial consumption risk over the two decades." The general point here is that because of market volatility, pension systems based primarily on stock market investments, are not very good at ensuring inter-temporal smoothing of consumption.[2]

12. Second and just as important, in addition to the risks for the retirees, stock market volatility has broader economic consequences. It reduces the effectiveness of stock market prices in allocating resources efficiently. Moreover, stock market fluctuations are likely to discourage risk averse savers and investors and thereby raise the cost of capital to the Corporate sector. Similarly, volatility may adversely affect general investor confidence and lead to a reduction in aggregate investment in the economy as a whole.

However, in the Turkish case we also have to be aware of further complications which arise from the general macro-economic instability of the economy. As Akyuz (1993) shows, the foreign exchange market and the stock market, under unstable macroeconomic conditions, may interact with each other to produce even greater instability. This has been experienced in several countries, notably Mexico in the recent crisis.

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[2] See further Allen and Gale (1995). See also Business Week, 18th December 1995, pp 20 which details the difficulties the Chilean pension system has run into. These include the problem of stock market volatility.

The implications of this discussion for the proposed Turkish pension reform is that privatisation of a sizeable proportion of the pension provision and its investment on the stock market carries with it serious risks of making the economy even more unstable.

13. There is a further important consideration here which the Turkish advocates of privatised individual pension plans need to bear in mind. It is a remarkable fact that despite the high degree of price, exchange rate and stock market instability, the Turkish real economy has performed relatively well during the last decade. GDP has grown at a rate of about 5 percent per annum - this is not as good as the record of the East Asian tigers, but it is equivalent to or better than that of most other countries in the world during this period.

A part of the explanation for this robust performance of the real economy may lie in the fact that Turkey up to now has had a bank-based financial system, somewhat along the Japanese lines. Large corporate groups normally have close connections with a leading commercial bank. This system would have helped shield corporations from the vagaries of the stock market. In the 1980s, the large Turkish corporations were able to raise considerable amounts of equity capital on the stock market <u>when it suited them to do so</u> - when, for example, there was a share price boom and the cost of equity capital became lower than that available through bank borrowings.[3] However, unlike the Anglo-Saxon corporations, which are subject to <u>continuous</u> stock market discipline particularly through the market for corporate control, the Turkish firms are far less bound by the verdict of the stock market. This is because apart from its bank-based financial system, Turkey does not as yet have a market for corporate control.

[3] For a full discussion of these issues see Singh (1995a).

The analysis and evidence on the market for corporate control outlined in Singh (1995), indicate that the nature of the takeover discipline to which the Anglo-Saxon corporations are subject is not necessarily socially useful. Evidence suggests that the operations of the market for corporate control not only does not enhance overall economic efficiency, but the results of the takeover process may be perverse in a number of ways. It is for example not at all clear that the managements which are selected for survival are necessarily the better managements from the point of view of creating real wealth, rather than simply being more skilled at financial engineering.

The existence of a highly active market for corporate control with its hostile takeovers and leveraged buy-outs obliges the US and the UK managers to pay close attention to their earnings per share performances every quarter or every six months. This forces them to become "short-termist" in their outlook and to sacrifice long term useful investments at the altar of short term earnings. This is in part the reason why many people argue that the stock market-based financial system puts Anglo-Saxon countries at a comparative disadvantage in relation to Germany and Japan which for historical reasons have bank-based systems. Thus, Michael Porter, reporting recently on the results of a large research project on various aspects of the US financial system: "....the change in nature of competition and the increasing pressure of globalisation make investment the most critical determinant of competitive advantage....Yet the US system of allocating investment capital both within and across companies is failing. This puts American companies at a serious disadvantage in global competition and ultimately threatens the long term growth of the US economy".

The main import of the above discussion is that the introduction of mandatory funded individual pensions will greatly increase the role of the stock market in Turkish economy. This is likely to change at the microeconomic level the traditional finance-industry relationships in the country, with adverse consequences for long term investments and economic growth.

It may be argued that pension funds, because of their long term liabilities, are more likely to behave like banks rather than short term liquidity traders or speculators. In principle, it is true that institutional share ownership should lead to long term value maximization and to "patient capital". However in practice, analysis and evidence from both the US and UK suggest that because of the particular structural features of institutional fund management, the opposite situation prevails. Fund management is a highly competitive industry and increasingly the performance of fund managers themselves is assessed on the basis of short term results. This leads to high share turnover, acceptance of takeover bids on the basis of short term financial gain rather than long term industrial logic.[4] The latter behavioral pattern is also connected with the phenomenon of "asymmetric payoff". It is pointed out that there are sound reasons for fund managers to display a "herd" instinct: if a fund manager who decides not to follow the "herd" turns out to be wrong in his investment policies when the herd is right, he or she may be subject to severe penalties, e.g may lose his/her job. On the other hand if the herd is wrong and the fund manager is right, the pay-off may not be as great - it will usually take the form of a promotion or pay-rise. Thus faced with the prospect of an immediate stock market gain, say from a "takeover situation", the fund managers are more likely to accept it than to worry about its long term potential.

14. To sum up, the main implications of the foregoing analysis is that Turkish pension reform instead of providing a solution to the country's fiscal crisis, increasing savings etc., may in fact have the opposite effect. As a consequence of general macroeconomic instability, the different assets market (for example, for those of foreign exchange and the stock market), may interact to provide yet greater instability. Similarly, the enhanced role of the stock market entailed in the proposed

[4] For a fuller discussion of this argument, see Cosh, Hughes and Singh (1990). See also Singh (1995).

pension reform, may subvert the traditional nature of the finance-industry relationship in the economy, with negative consequences for long term economic growth. Turkish authorities should clearly be made fully aware of this "downside" of the proposed pension reform. The authorities may be lucky and may for one reason or another escape the full negative consequences of the enhanced role for the stock market. Yet they may not.

There is no "free lunch" here. Instead of risking greater short term instability and lower long term economic growth, the first best solution to the Turkish pension crisis may still be that of raising the pension age, improving the collection of contributions and other ways to make the system actuarially sound. Of course, these measures are politically difficult to implement but regrettably hard political choices to reduce the macroeconomic instability of the Turkish economy cannot be avoided. Seemingly easy solutions such as individual private pensions may carry enormous risks. There is unfortunately no quick fix.

15. Finally as I noted at the outset, this is an interim report which questions the advisability of the proposed pension reform. However, if the government in the full knowledge of the unfavourable consequence which may ensue, still insists on the implementation of these reforms, in the next report on the subject, I shall propose some regulatory safe guards which may at least reduce these risks.

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