

## Midterm Exam II

### Instructions

*Read the entire exam over carefully before beginning. The value of each question is given. Allocate your time efficiently given the price schedule that is imposed. There are no trick questions.*

1. (30 %) External liberalization in transition economies is complicated by the problem of industries that actually destroy value at world prices. Carefully explain the meaning of negative value added at domestic prices and at world prices.

**brief answer** Let  $z_i$  be the output of (enterprise or sector)  $i$ , and  $M$  be purchased material inputs. Then NVA at domestic prices means that

$$P_i z_i - P_M M < 0$$

where  $P_i$  and  $P_M$  are the prices of output and materials at domestic prices. NVA at world prices then means that:

$$P_i^* z_i - P_M^* M < 0$$

where  $P_i^*$  and  $P_M^*$  are world prices.

- (a) Why are transition economies plagued with problems of negative value added producers? Why is the presence of sectors that produce negative value added problematic for liberalizing economies?

**brief answer** Primarily because industrial decisions were not based on cost considerations. Also certain costs were not included in calculations, such as rent and transport costs. When liberalization comes enterprises must cover all costs. Plus energy costs move higher due to the end of subsidization. With external liberalization prices move towards world prices this means that enterprises that produced value added at domestic prices could still destroy value at world prices. If such enterprises exist, they will not be able to compete after liberalization.

- (b) Why was this competitiveness problem more severe in Russia than in many East European transition economies?

**brief answer** Primarily because energy and raw materials was subsidized even more in the FSU than in EE. One could also point to a larger number of defense plants, although Slovakia suffers from the same problem. The wrong prices of raw materials and bigger domestic market is probably the more important reason.

- (c) How can the same industry produce value added at domestic prices but destroy value at world prices?

**brief answer** Because the foreign trade mechanism distorts domestic and world prices. Explicit protection of manufacturing and implicit export taxes on materials inputs makes the two sets of prices depart. If  $P_i > P_i^*$  and if  $P_M < P_M^*$  then this is possible. The distortion of domestic and world prices leads to production decisions that would not be made if prices were more in correspondence.

2. (35%) The current market value of shares in privatized Russian enterprises suggests that many enterprises are "under-valued" when compared with "similar" enterprises in western economies. What are the most important factors responsible for this "under-valuation?" Which of these do you think is most important? Explain.

**brief answer** Bad corporate governance means that owning shares may not entitle the owner to the profits of the enterprise. This creates a discount from the true value of the firm. Second, the system may not operate well – due to corruption and other problems – which makes the assets less valuable in Russia than elsewhere. Third, insider domination may lead to little restructuring (this is related to the first reason).

- (a) To what extent does this under-valuation represent a problem?

**brief answer** In itself the value of assets is irrelevant; what matters are relative prices, not the level of valuations. What does matter is that the causes of the low valuation are real problems. They lead to less restructuring and modernization, and they reduce foreign investment in enterprises.

- (b) Is it meaningful to speak of undervalued assets? What does this actually mean, if anything, economically?

**brief answer** One could say that the value of assets are what people are willing to pay for them – so there is no point to talking about undervaluation. But for the reasons pointed to above there really is an issue. If the same asset is worth less in Russia than elsewhere it is due to barriers to foreign investment and to poor use of the resources domestically.

- (c) What factors can be undertaken to enhance the market values of Russian enterprises?

**brief answer** Improve corporate governance is clearly one big thing.

- (d) Why might enterprise directors resist some of these policies?

**brief answer** To the extent that poor corporate governance is used to maintain insider domination they will be loathe to accept such changes. To the extent that enterprises are looted by insiders they do not want to increase asset value if that weakens their control.

3. (35%) Price liberalization led to a sharp increase in inflation in all transition economies. Why?

**brief answer** Because of the monetary overhang that built up in the latter stages of socialism. Also, inflation was repressed by price controls, and hidden by introduction of fake new products. In addition, increased opportunities to hold assets led to reduced demand for domestic currencies. This flight reduced the value of the currency and raised import prices also contributing.

- (a) It is clear that price liberalization should lead to changes in relative prices, but why did it lead to inflation?

**brief answer** Because of the overhang. Without it, perhaps there would not have been inflation.

- (b) What is the relationship between measured real income and welfare in planned economies? How can price liberalization simultaneously lead to an increase in aggregate social welfare and a decline in measured aggregate real income?

**brief answer** Measured real income and welfare go in opposite directions in planned economies, when there is aggregate excess demand. The reason is that controlled prices mean that excess demand translates into longer queues rather than higher prices. So excess demand leads to higher measured real incomes, but the longer queues mean that the cost of acquiring goods increases. So welfare falls. This would not be true if real output actually increases, then consumption could rise. But when the rise is due to excess demand, rather than more goods, welfare clearly falls. Price liberalization eliminates queues. This reduces the cost of shopping. So welfare rises. But the higher prices means that *measured* real income falls due to the higher price level.

- (c) Price liberalization leads to winners and losers. Who are the major winners from price liberalization? Who are the losers?

**brief answer** The winners include all those for whom the opportunity cost of shopping was high under planning. For example, women who had to do it. But anyone who is busy. The losers are those who had relatively lower costs of shopping – those endowed with time, such as the elderly. They are on fixed incomes, so they could buy at low prices and re-sell. With liberalization they lose this opportunity.

- (d) Are the gains of the winners greater or smaller than the losses of the losers? Explain.

**brief answer** The gains should exceed the losses. The reason is that the queues represent deadweight losses. Eliminating them should result in more overall welfare. Just consider the time wastes standing in line. People could have leisure or work more – in either case there will be more utility.