Midterm Exam I: Answer Sheet

These are sample answers. They are not the only correct answers, nor are they fully complete. They are given as remarks.

1. *(30%)* The problem of transition is complicated by the need for a series of steps for which success depends on implementation of other reforms. Comment.

Remark 1 *The essence of this question concerns* sequencing, *or what we have referred to as the chicken and egg problem. Some steps in transition are necessary for others to be successful. But what should go first?*

(a) What are the major steps necessary for the transition to a market economy? Describe the major changes that must be made in this process.

Remark 2 *The standard list of steps would include privatization, the creation of property rights, price liberalization, external liberalization, hardening budget constraints, and the creation of financial markets.*

(b) Provide an example of the mutual dependence of some of these steps. Explain why the success of one reform depends on the success of another one.

Remark 3 *One example would be privatization and price liberalization. To know the value of assets it is necessary to liberalize prices. With Soviet-type prices the value of assets would not be indicative of their true value. This suggests that price liberalization should precede privatization. But without privatization state-owned enterprises may not worry about the bottom line. Hence, it is not clear that appropriate supply responses will be forthcoming when prices are liberalized.*

(c) Which aspects of transition are most dependent on the successful implementation of other steps?

Remark 4 *A good example might be external liberalization and price liberalization. Suppose that the market is opened to foreign competition but prices are not yet liberalized. Then resources will not sell for at their opportunity costs. Suppose energy prices are below their true costs, as was the case in the Soviet Union. If the market is opened to foreign trade, agents will be able to buy energy domestically at the subsidized price and sell it on world markets at the higher world prices. Agents with access to the "cheap" energy resources would earn excess profits, while domestic users would not be able to purchase energy.*

(d) Some people argue that it is necessary to create competitive markets before enterprises can be privatized. Do you agree or disagree? Explain.

Remark 5 *The argument is that monopolized industries will charge excessive prices and restrict output. This is correct and it does result in lower welfare. But state-owned enterprises do not minimize costs, while privately owned monopolies do. So the tradeoff depends on how large are the costs of monopoly pricing versus the effects of inefficient use of inputs. It is likely that the latter exceed the former.*

2. *(35%)* What is the relationship between measured real income and welfare in planned economies?

Remark 6 *In market economies we expect real income and welfare to move in the same direction. But in planned economies, where prices are fixed below market clearing levels, they may move in opposite directions. The reason is that when demand exceeds supply at the official price, the excess demand spills over into longer lines and diversion to parallel markets.*

(a) How can price liberalization simultaneously lead to an increase in aggregate social welfare and a decline in measured aggregate real income?

Remark 7 *As in the previous remark, suppose that prices are initially fixed below market clearing levels. Now let prices be freed. Before any change in output or nominal income (Y) can occur all that happens is that prices (P) go up. This means that measured real income will decrease, as will queues. Agents still consume the same quantity of goods, but they waste fewer resources (leisure) to do so. Hence, their welfare must have increased, but measured real income $\frac{Y}{P}$ certainly goes down.*

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

Remark 8 *The losers are those who have a low opportunity cost of waiting, and those who had privileged access to goods in short supply. Primarily the elderly and the* nomenklatura. *The winners are those with a high opportunity cost of time and the people with no access. Market-clearing prices equalizes access to goods. Those who have little time to wait now have a better chance to purchase goods.*

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

Remark 9 *One way to think about this is that with excess demand some resources are wasted trying to purchase goods (waiting in line rather than working, for example). These are deadweight losses to society. So the gains from price liberalization, which includes the elimination of this waste, should exceed the losses. This does not mean, however, that the winners will compensate the losers, so this is of little consolation to the losers in practice.*

(d) What role, if any, does the monetary overhang have in complicating the relationship between measured real income and welfare? Explain.

Remark 10 *This really restates the problem. The monetary overhang is the excess purchasing power that cannot be realized at fixed prices. It is the amount by which the money stock could be reduced without reducing actual consumption. If there was no monetary overhang, then welfare and measured real income would move together.*

3. *(35%)* What is meant by the term *hard-budget constraint*? What is the difference between a *hard* budget constraint and a *soft*-budget constraint?

Remark 11 *A hard-budget constraint (HBC) binds after the fact, while a soft-budget constraint (SBC) does not. This means that if an enterprise with a SBC incurs a loss the difference between costs and revenues is written off (a transfer to the enterprise's account is automatically made by the state bank). With an HBC an enterprise that cannot cover costs, and that cannot borrow, will be shut down.*

(a) Why did enterprises in Soviet-type economies have *soft*-budget constraints? Why did this make sense under central planning?

Remark 12 *In an STE the primary problem was plan fulfillment. The financial account of an enterprise was a monitoring device. Suppose an enterprise has insufficient funds to purchase inputs needed to fulfill the plan. If the enterprise had a HBC it would not get the inputs and it would fail to fulfill the plan. This would have negative consequences in the rest of the economy. With a SBC the enterprise would not be prevented from plan fulfillment. Because prices were arbitrary, the enterprise's bottom line was not indicative of good performance, but plan fulfillment was. That is why SBC's has some logic under central planning.*

(b) What problems were created in planned economies by the prevalence of *soft*-budget constraints?

Remark 13 *SBC's lead to a seller's market. Because no enterprise is constrained by funds, they will have unrestrained demand for goods. More inputs increases the likelihood that plans will be fulfilled. But a seller's market means little regard for quality. Enterprises can sell what ever they produce because of the excess demand. Lower quality lowers efficiency, however.*

(c) What problems are created for the transition by the presence of *soft*-budget constraints?

Remark 14 *This answer could go on forever. If the plan is eliminated but enterprises have SBC's their demand will not be restrained. This means that enterprises will continue to ignore the bottom line. This is problematic when decisions are no longer guided by the plan. Moreover, the losses incurred by enterprises with SBC's must be paid out of the state budget. This means the state budget comes under increased pressure, resulting in higher taxes which would restrain new market development, or (more likely) higher budget deficits which complicates macroeconomic stabilization.*