Comments on "Understanding the Evolution of World Business Cycles" by Kose, Otrok and Whiteman.

Prakash Loungani, IMF April 2002

This is a very worthwhile project and I enjoyed reading the outline. I have the following suggestions for the authors.

1. Motivation for the paper

I thought the paper was motivated in a somewhat confusing fashion, leaving the reader unclear as to whether s/he would be getting a rigorous statistical exercise or a paper that aimed to address a particular policy question (such as, has "globalization" increased the correlation of business cycles across countries). My preference would be to motivate the paper as follows:

This is a rigorous statistical exercise in decomposing fluctuations in a set of key macroeconomic variables into world, country-specific and variable-specific components. The exercise is valuable in its own right in establishing stylized facts our theoretical models of business cycles should try to replicate. As a by-product, the exercise may also help shed light on some issues that have come up recently in academic and policy circles such as: (i) Is Robert Rubin right? (i..e has "economic interdependence has greased the spread of the American downturn"?); (ii) Are Frankel and Rose right? (European Economic Review, 1997; Do countries that enter currency unions have more correlated business cycles?); (iii) Is there an Anglo-Saxon business cycle? (Alan Friedman, International Herald Tribune, 1/22/97).

I don't see the need to throw in buzzwords like "globalization" in the introduction as a motivation.

2. Why estimate over sub-periods?

I did not understand why the sample period was split up into sub-periods and, if I understand correctly, the estimation was done separately for each sub-period. The sub-periods are too short to be comfortable that the "long run" has really kicked in and the break-points chosen seem arbitrary. For example, 1986 was the year of a huge decline in world oil prices (a common shock) and so 1986-87 could easily go instead with the "oil shocks" subperiod of 1973-85.

3. Pros and cons of the statistical method

The outline lacked an honest discussion of the pros and cons of the statistical method. Estimating the model requires several restrictions (e.g. cutting off some of the lagged

responses of country variables to the world variable); so the estimate of the world factor is obtained conditional on these (most likely invalid) restrictions. If the estimate of the world factor is very sensitive to the nature of the restrictions placed, then one begins to wonder what the method is delivering relative to more informal methods of analyzing the data. For example, Chapter III of the most recent World Economic Outlook uses somewhat more informal methods to look at correlation of business cycles across industrialized countries over a long period of time. What does the method used in this paper offer over such informal ways of characterizing the data?

4. Role of capital controls

The authors emphasize the role that the breakdown of the Bretton Woods system may have played in changing the properties of world business cycles. But if I remember correctly, the Baxter/Stockman paper found that, to a first approximation, the change in regime from fixed to floating didn't affect moments or correlations of key macro variables. I would suggest that the phasing out of capital controls may be more important than changes in exchange rate regime in affecting business cycle properties. See (i) Razin and Rose, 1994, Business Cycle Volatility and Openness; (ii) Loungani, Razin and Yuen, Journal of Development Economics, 2001.

Why not include prices (or inflation) in the set of variables? It'll allow you to entertain a much broader class of RBC models.