Annex Figure 3.1.1. Conditional Densities of Growth with High and Low Asset Prices—One-Period-Ahead Forecasts (Frequency)

1. High Asset Prices

2. Low Asset Prices

3. Unconditional

Source: IMF staff estimates.
Annex Figure 3.1.2. One-Period-Ahead GDP and Financial Conditions
(Normalized; steady state = 1.0)

Increasing risk premiums signal a more pessimistic growth outlook ...

... as does elevated leverage.

Source: IMF staff estimates.
Annex Figure 3.1.3. Asset Prices and Credit Aggregates before and after a Financial Crisis

Severe economic contractions are preceded by several periods of excessive leverage and, shortly before the crisis, by sharply rising risk premiums.

1. Output
   (Normalized; steady state = 1.0)

2. Credit-to-Output Ratio
   (Normalized; steady state = 1.0)

3. Risk Premium
   (Percent)

Source: IMF staff estimates.
Note: The crisis happens in period 5 (t) in the figures. The crisis is defined as a period in which output declines by more than 3 percent. The red dashed lines denote steady-state values.
Annex Figure 3.1.4. Simple Debt Tax Ameliorates Risk of Leverage-Induced Recessions

1. Output
   (Normalized; steady state = 1.0)

2. Asset Prices
   (Normalized; steady state = 1.0)

3. Credit-to-Output Ratio
   (Normalized; steady state = 1.0)

4. Inflation
   (Percent)

Source: IMF staff estimates.