



A trend-cycle decomposition with hysteresis

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The business cycle is the cycle in the output gap and also in a stationary measure of trend output. Both the output gap and trend output are driven by joint trend-cycle shocks. The model is a univariate trend-cycle decomposition with hysteresis in trend output that enables the estimation of the output gap and trend output in 81 economies in quarterly frequency, since 1995Q1; and 184 economies in yearly frequency, in several cases since 1950, and in a few cases since 1820. Volatility and dispersion, as well as the frequency of large joint trend-cycle shocks, were low during the Gilded Age period; high during the interwar period, even more so in advanced (AD) economies compared to emerging market and developing economies (EMDE); and low in AD economies and high in EMDE economies in the post WWII period. In contrast with other existing estimates of trend output, those from the trend-cycle decomposition with hysteresis do not evolve smoothly, do not result in an artificial boom before recessions and are less sensitive to new data.