

# THE LONG-RUN PHILLIPS CURVE AND NON-STATIONARY INFLATION

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## DATA SOURCES AND DETAILS

The CPI data and unemployment rate data were downloaded from the United States of America, Bureau of Labour Studies. The national accounts data were downloaded from the National Income and Product Account tables from the United States of America, Bureau of Economic Analysis. The data for March 1952 to September 2004 was downloaded on 25 November 2004. Except where indicated, the data are quarterly and seasonally adjusted. The mnemonics are from the databases that they were downloaded from.

**Table A1: Sources and details of the data manipulation**

<i>Variable</i>	<i>Details</i>
Consumer price inflation	The monthly CPI is the US city average, all items, 1982-84=100, ID: CUSSR0000SA0. The derived quarterly data is the average of the monthly data. CPI inflation is the change in the natural logarithm of the quarterly CPI multiplied by 400 to give the annualised rate. - <b>cpi in Excel file</b>
Unemployment rate	The unemployment rate is the number of people over 16 years as a percentage of the non-institutionalised civilian population, ID: LNS14000000. The derived quarterly data is the average of the monthly data. - <b>ue in Excel file</b>
Gross domestic product (GDP) at constant prices	Constant price GDP at 2000 prices, Table 1.1.6, line 1. - <b>y in Excel file</b>
Gross domestic product (GDP) implicit price deflator at factor cost	Nominal GDP at factor cost is nominal GDP (Table 1.1.5, line 2) plus subsidies (Table 1.10, line 10) less taxes (Table 1.10, line 9). GDP implicit price deflator is nominal GDP at factor cost divided by constant price GDP. - <b>ipdfc in Excel file</b>
Total labour compensation	Wages, salaries and supplements, Table 1.10, line 2. - <b>w in Excel file</b>
Unit labour costs	Calculated as total labour compensation divided by constant price GDP.
Markup	Calculated as the consumer price index divided by unit labour costs.
De-trended Variables	<p>The variables are de-trended using broken linear trends. The breaks are identified using the augmented Perron (1997) unit root test which allows for the presence of an endogenous change in the level and slope of the trend function. Having identified the break (or breaks by using the technique sequentially) the data is regressed on a constant and trend as well as a 'short' trend, shift constant, and spike dummy for each break in trend. The short trend is zero for each period up to the break and then a linear trend thereafter. The shift dummy is zero up until the break and one thereafter. The 95 % critical value is - 3.13.</p> <p>Unemployment Rate: There is a break in trend and constant in June 1978 (test statistic -4.1).</p> <p>Business cycle (measured as de-trended natural logarithm of constant price GDP): The test identifies two breaks in the trend and constant. September 1963 (test statistic - 4.8). December 1979 (test statistic - 5.6).</p>