

Unemployment, Taxation and Public Expenditure in OECD Economies

Data sources and definitions

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- **gov_effic**: The government efficiency is constructed by Kaufmann, Kraay and Mastruzzi (2003) as an aggregate governance indicator that measure perceptions of the quality of the bureaucracy, the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the governments's commitment to policies into a single grouping. The main focus of this index is on "inputs" required for the government to be able to produce and implement good policies and deliver public goods. Source: Kaufmann Kraay and Mastruzzi (2003).
- **u**: Standardized unemployment rate. Source: OECD National Accounts.
- **pgdp**: Deflator of GDP. Source OECD National Accounts.
- **y**: per capita real GDP in PPP. Source: de la Fuente and Domenech (2006).
- **pr**: real GDP per employee in PPP. Source: de la Fuente and Domenech (2006).
- **ep**: employment protection index (0-2). Most data are from Nickell, Nunziata and Ochel (2005). This variable captures the strictness of employment protection laws. 0 low, 2 high. Data for Greece is only available for 1973 to 1999 from Holden and Wulfsberg (Table A2). Observations for Greece before 1973 are assumed to be equal to the value observed in 1973.
- **udnet**. Net union density from Nickell, Nunziata and Ochel (2005). This variable is defined as the ratio of total reported union members (less retired and unemployment members). Data for Greece is only available for 1973 to 1999 from Holden and Wulfsberg (Table A3) and the observations before 1973 are assumed to be equal to the value observed in 1973.
- **co**. Coverage index ranges [1,3] constructed as an interpolation of OECD data on bargaining coordination. It is increasing in the degree of coordination in the bargaining process on the employers' as well as on the unions' side. Source: Nickell, Nunziata and Ochel (2005). Primary source Belot and Van Ours (2000).

- **brr.** Benefit replacement rates come from Nickell, Nunziata and Ochel (2005) and represent the benefit entitlement before tax as a percentage of previous earnings before tax. Data are averages over replacement rates at two earnings levels (average and two-thirds of average earnings) and three family types (single, with dependent spouse, with spouse at work). They refer to the first year of unemployment. The original data are for every second year and have been linearly interpolated. Nickell, Nunziata and Ochel provide data from 1960 to 1999. The publication Benefits and Wages OECD (2004, table 3.4) provide data for 2001. Data for Greece is only available for 1999 and 2001 from Benefits and Wages (OECD 2002 and 2004). These observations are interpolated for the entire period take into account the OECD summary measure of benefit entitlements, 1961-2001 from Benefits and Wages (2004). Source: Database on Unemployment Benefit Entitlements and Replacement and Benefits and Wages.
- **bd.** Benefit duration index comes from Nickell, Nunziata and Ochel (2005) and it is defined as

$$BD = \alpha \frac{BRR_2}{BRR_1} + (1 - \alpha) \frac{BRR_4}{BRR_1}$$

where: $\alpha = 0.6$, BRR_1 is the unemployment benefit replacement rate received during the first year of unemployment, BRR_2 is the replacement rate received during the second and third year of unemployment and BRR_4 is the replacement rate received during the fourth and fifth year of unemployment. Source: OECD Database on Unemployment Benefit Entitlements and Replacement.

- **ho:** housing (percentage owner occupied) from Nickell, Nunziata and Ochel (2005). This variable provides information about the owner occupier households as percentage of total households. Source: Nickell, Nunziata and Ochel (2005).
- **tts:** terms of trade shock (import prices over GDP prices).from Nickell, Nunziata and Ochel (2005). This series is equal to

$$IMP = \frac{MC}{YC} \Delta \ln \left(\frac{P_m}{P_G} \right)$$

where MC are imports at current prices, YC is GDP at current prices, P_m is import price deflator and P_G is GDP deflator at market prices, both with 1990 as base year. Source Nickell, Nunziata and Ochel (2005).

- **rlc:** real labour costs. Source: OECD Economic Outlook.
- **ucl:** unit labour costs. Source: OECD Economic Outlook.
- **rgdp:** real GDP in PPP. Source: de la Fuente and Domenech (2006).
- **irl:** long-term nominal interest rate on long-term government securities. Source: OECD Economic Outlook.
- **inflation:** inflation rate. Source: OECD Economic Outlook.
- **k/y:** capital to output ratio. Source: de la Fuente and Domenech (2006).

- The **effective tax rates** have been calculated by following the method proposed by Mendoza, Razin and Tesar (1994). The calculation of effective labour and capital tax rates is based on following formulas according to Boscá, García and Taguas (2005)

$$\tau_{per} = \frac{1100}{W + PEI + OSPUE}$$

$$\tau_l = \frac{\tau_{per}W + 2000 + 3000}{W2000}$$

$$\tau_c = \frac{5110 + 5121 + 5123}{CPN + G}$$

where τ_l is the labour tax defined as the product of the personal income tax ratio (τ_{per}) and wages and salaries (W) plus total social security contributions (item 2000 in OECD Revenue Statistics) and taxes on payroll and workforce (item 3000) over the sum of wages and salaries plus employers' social security contributions (item 2200). τ_{per} is the personal income tax is defined as the ratio of revenues from taxes on income, profits and capital gains of individuals (item 1100) to the tax base that consists of wages and salaries (W), the operating surplus of unincorporated enterprises ($OSPUE$) and the property and entrepreneurial income of households (PEI). τ_c is the consumption tax rate is defined as the ratio of revenues from general taxes on goods and services (item 5110) plus excise taxes (item 5121) and customs and import duties (5123) over the sum of private final consumption (CPN) and government final consumption expenditure (G). Sources: database of Boscá, García and Taguas (2005) and OECD National Accounts and OECD Revenue Statistics.

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