

# The US inflation–unemployment trade-off revisited: New evidence for policy-making

Marika Karanassou<sup>a,b</sup>, Hector Sala<sup>b,c,\*</sup>

<sup>a</sup> School of Economics and Finance, Queen Mary University of London, Mile End Road, London E1 4NS, UK

<sup>b</sup> IZA, Bonn, Germany

<sup>c</sup> Departament d'Economia Aplicada, Universitat Autònoma de Barcelona, 08193 Bellaterra, Spain

Received 1 February 2010; received in revised form 1 July 2010; accepted 10 August 2010

Available online 24 August 2010

---

## Abstract

This paper addresses the various methodological issues surrounding vector autoregressions, simultaneous equations, and chain reactions, and provides new evidence on the long-run inflation–unemployment tradeoff in the US. It is argued that money growth is a superior indicator of the monetary environment than the federal funds rate and, thus, the focus is on the inflation/unemployment responses to money growth shocks. Structural vector autoregression (SVAR) and generalised method of moments (GMM) estimations confirm earlier findings in Karanassou, Sala, and Snower (2005, 2008b) obtained from chain reaction structural models: the slope of the US Phillips curve is far from vertical, even in the long-run, which implies that the nominal and real sides of the economy are symbiotic. In the light of the significant and robust long-run inflation–unemployment tradeoffs, policy makers should reconsider the classical dichotomy thesis. © 2010 Society for Policy Modeling. Published by Elsevier Inc. All rights reserved.

*JEL classification:* E24; E31; E51

*Keywords:* Inflation; Unemployment; Money growth; SVAR; GMM; Structural modelling; Chain reactions

---

## 1. Introduction

The extent to which movements in output and unemployment depend on monetary fluctuations is a crucial issue in today's macroeconomics. Of particular interest, in this context, is to know

---

\* Corresponding author at: Universitat Autònoma de Barcelona, Departament d'Economia Aplicada, 08193 Bellaterra, Spain. Tel.: +34 93 581 27 79; fax: +34 93 581 22 92.

*E-mail addresses:* [m.karanassou@qmul.ac.uk](mailto:m.karanassou@qmul.ac.uk) (M. Karanassou), [hector.sala@uab.es](mailto:hector.sala@uab.es) (H. Sala).

how nominal magnitudes (such as the price level or money supply) interact with real economic activity and how this interaction evolves with the passage of time. The conventional wisdom supports the classical dichotomy and the absence of an inflation–unemployment tradeoff in the long run, i.e. the slope of the Phillips curve (PC) is vertical in the long run. Sachs (2009) points out that “The crash of 2008 exposed deep failures at the core of macroeconomic policymaking and macroeconomic thinking, and argues that the heated debates between neo-Keynesians and free-market economists have obscured a large and ultimately damaging consensus on economic thinking.” (Sachs, 2009, p. 1). We regard the classical dichotomy to have a prominent role in this consensus.

The main objective of our work is to provide further evidence on the long-run relationship between inflation and unemployment for the US. This evidence is based on new estimates of the slope of the PC using two popular econometric techniques, structural vector autoregression (SVAR) and generalised method of moments (GMM), and supports previous results obtained through the estimation of dynamic multi-equation structural models. We refer, in particular, to the downward sloping PC documented for the US in Karanassou, Sala, and Snower (2005, 2008b) over the 1966–2000 and 1963–2005 periods.

While we argue against the classical dichotomy doctrine, we unequivocally do not believe that it should be replaced by another doctrine. The existence of a downward-sloping PC at all time horizons simply demonstrates that money is an important driving force of unemployment. Nevertheless, in line with Ostrom (2007, p. 15176), we do not fall into panacea traps and do not perceive the inflation–unemployment tradeoff as a blueprint for reducing unemployment, since this would shift the focus of policy makers away from identifying the factors which jointly drive inflation and unemployment.<sup>1</sup> As Phelps (2009a) argues we cannot understand well the big decline in aggregate employment without making allowance in our thinking for some important changes in the structure of the economy.

The main contribution of our paper is to assess the robustness of the results in Karanassou et al. (2005, 2008b) using different empirical procedures. Furthermore, we provide a systematic compare and contrast discussion of the various methodological issues associated with the econometric approaches of structural models, SVAR and GMM, and highlight their respective pros and cons. This discussion is necessary in view of the common assertion that “There is as yet little certainty about how best to specify an empirically adequate model of aggregate fluctuations.” (Woodford, 2009, p. 275)

In the context of dynamic multi-equation systems (like SVARs and “structural” models), the inflation–unemployment tradeoff can be measured by the ratio of inflation and unemployment responses to a monetary policy shock. In turn, in the context of single equations (like the hybrid new Keynesian PC model), this tradeoff is measured by the short- and long-run sensitivities of inflation to the unemployment rate. In both cases, the Phillips curve can be regarded as a function that, given a monetary policy shock, translates the impulse response function (IRF) of unemployment into the IRF of inflation and vice versa (Mankiw, 2001). Therefore, to evaluate the tradeoffs between nominal and real developments it is crucial to identify the relevant monetary policy shock.

---

<sup>1</sup> As an example of such an all-encompassing approach, see Karanassou et al. (2008b) who examine the “roaring nineties” in the US and find that, whereas the increase in money growth put upward pressure on inflation and substantially lowered unemployment, the rise in productivity growth, the budget deficit reduction, and the increase in the trade deficit put downward pressure on inflation and had a modest impact on the unemployment rate.

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات