The mechanisms through which monetary policy (MP) affects inflation and real economic activity are central to macroeconomics. During the past few decades, New Keynesian models have constituted the dominant view of that transmission mechanism. In those models, MP affects inflation and real economic activity through the effect of interest rate changes on firms' mark-ups over marginal costs of production. Changes in mark-ups have a redistributive effect between labour and profits. The essence of that mechanism in its simplest version is as follows: when prices cannot adjust immediately, a monetary policy contraction that reduces demand implies that prices are too high relative to optimal because firms cannot lower prices to adjust to the fall in demand; since prices are above optimal, firms are charging a higher mark-up after the contractionary MP surprise. Since mark-ups rise, the labour share of income falls and the profit share (mark-ups) increases. Thus, we would expect that, after a MP contraction, cyclically, the labour share would fall.

In this paper we provide comprehensive evidence on the effect of MP surprises on the labour share for five developed countries (Australia, Canada, EU, US, and the UK) using state of the art econometric techniques. Contrary to the expected result from the basic New Keynesian model, we find that, systematically, the labour share increases cyclically after a MP contraction. This fact is robust to different countries, measures of the labour share, sample periods, econometric model specifications, shock identification methods, and sectors. The reason why the labour share increases is because real wages fall but labour productivity falls more than real wages. Since the labour share is simply the ratio of the two, it increases after a contractionary MP surprise.

We then ask whether macroeconomic models widely used to analyse the effect of MP on the economy are well equipped to reproduce that response. In more elaborate versions of the New Keynesian model that incorporate different real and nominal rigidities in the economy, the direct relationship between mark-ups and the labour share breaks down. Hence, potentially, these models can generate a response of the labour share in line with our data findings.

We analyse models incorporating a cost channel of MP, fixed costs of production, different production functions, and search and matching frictions in the labour market. The models are analysed numerically allowing for a wide range of behavioural and market structure parameter combinations. Our analysis shows that, even in these more elaborate versions, the models fail to reproduce the increase in the labour share after a MP contraction that we observe in the data.