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WHO BENEFITED FROM THE JULY 2009 SIT-DOWN RESTAURANT VALUE-ADDED TAX CUTS?

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Summary

In July 2009, the Value-Added Tax (VAT) rate on sit-down restaurants was cut from 19.6% to 5.5%. At the time, a substantial number of restaurant owners signed the so-called *Contrat d'avenir* committing to sharing the windfalls from the VAT reduction equally among consumers, workers and themselves. This note shows that the effects of the reform were significantly different from what was suggested by the *Contrat d'avenir*. Indeed, the VAT reduction mostly benefited restaurant owners. More precisely, we find that prices only decreased by 1.9% thirty months after the VAT cut, the cost of employees and material goods increased by 4.1 and 5 % respectively, and that the profits of sit-down restaurants owners increased by around 24 %. Using these estimates we conclude that: (1) the effect on consumers was limited, (2) employees and sellers of material goods shared 18.6 and 12.1% of the total benefit, and (3) the reform mostly benefited owners of sit-down restaurants, who pocketed around 56% of the tax cut. We also analyze the effect of the January 2012 VAT increase from 5.5% to 7% and the January 2014 VAT increase from 7% to 10% and find that prices increased 4 to 5 times more than they decreased following the VAT cut. This suggests that temporary VAT cuts mostly benefit firms rather than consumers and can result in higher equilibrium prices once repealed. ■

- Although the July 2009 sit-down restaurant VAT cut was supposed to be equally shared among restaurant owners, consumers and workers, it mostly benefited restaurant owners as prices decreased very little following the VAT cut.
- Sit-down restaurant prices responded 4 to 5 times more to the subsequent January 2012 and January 2014 VAT increases compared to their response to the July 2009 VAT decrease.
- As a consequence, temporary VAT cuts are not efficient at stimulating demand because they mostly benefit firms and can result in higher equilibrium prices.

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(1) The views expressed in this document are the authors' and should not be interpreted as CBO's.

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In March 2002, President Jacques Chirac who was running for re-election promised to cut the VAT rate from 19.6% to 5.5%. After his election, France officially requested from the European Commission the right to reduce the VAT rate. The request was turned down in October 2003 mostly because of German opposition to the reduction. In 2004, Gerhard Schröder, then Germany's chancellor, finally agreed to the rate decrease. In January 2009, the European Commission approved reclassifying sit-down restaurants from the standard rate to the reduced rate for all Member States. This reform was implemented in several countries including France, Germany and Finland. The official motivation of the reform was to create jobs and increase wages in this industry. But at that time, some economists opposed it on the grounds that it would be a regressive reform mostly benefitting richer consumers.

EVALUATION OF THE 2009 FRENCH VAT REFORM

In April 2009, representatives from the Government and from the restaurant industry reached a common agreement over the goals that needed to be achieved following the VAT cut and signed a *Contrat d'avenir*. The agreement's main clause was that firm owners would commit to sharing the VAT cut windfalls equally among consumers (via price decreases) workers (via wage increases) and themselves. In July 2009, sit-down restaurants were reclassified from the standard rate (19.6%) to the reduced rate (5.5%). In October 2009, realizing that prices were not sufficiently decreased and wages were stagnant, the Government requested another meeting with restaurant representatives to try and put additional pressure on them so that they abide by the *Contrat d'avenir*. The government also requested that restaurants attach standardized posters on their windows announcing that they are cutting prices, when they do so. It is estimated that the 5.5% rate cost 3 billion euros in 2010, making it one of the largest firm subsidies in France. In comparison, research and development credits cost 4 billion euros in 2010.

In January 2012 and 2014 the reduced VAT rate was increased from 5.5% to 7% and from 7% to 10% as part of an effort to reduce the budget deficit and reach the deficit targets set by the European Union.

Our method to estimate the effects of the reform

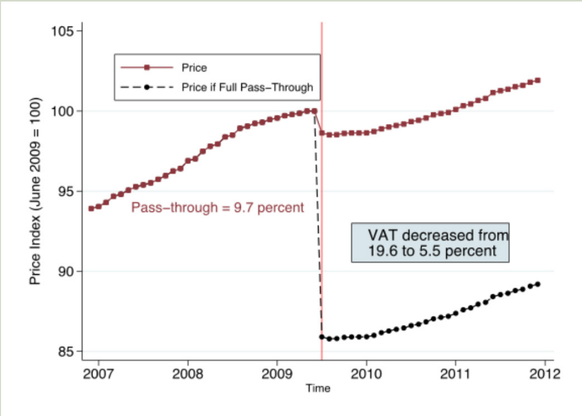
To properly assess the effects of the reform we cannot simply compare the outcomes of interest before and after the reform is introduced in part because there are other factors affecting the restaurant industry at the time including the fact that France was entering a deep recession. For this reason, and to account for these additional factors, we compare sit-down restaurants to a very similar industry that was not affected by the July 2009 VAT cut, namely take-out restaurants and other small services. We compare the evolution of four main outcomes: prices, profits, cost of employees and cost of material goods. Because take-out restaurants and other services were not affected by the reform and are similar to sit-down restaurants, they constitute a good counterfactual of what would have happened to sit-down restaurants absent the tax change. To do so, we use two datasets. The first one contains times series of prices for every commodity in the economy, including sit-down restaurants, take-out restaurants, hotels and other small services. The second dataset is called Amadeus and contains detailed balance sheet information on a large sample of French firms and covers approximately 50% of all French restaurants.

RESULTS OF THE EVALUATION

Prices decreased very little following the VAT cut

Observing how prices respond is sufficient to assess the share of the windfall that goes to consumers: if prices drop by 14.1% following the rate cut from 19.6% to 5.5%, that would mean that consumers pocketed the entire VAT cut. Instead we find that prices decreased by a mere 1.4% implying that only 9.7% of the VAT cut was transferred to consumers 30 days after the reform. The level of the decrease did not change much in the longer term as we estimate that the price level 30 months after the reform was only 1.9% ower than it would have been without the reform.
This implies that the remaining 90.3% were transferred to firms but does not necessarily mean that their profits increased by this full amount, since this extra windfall can be shared among the different stakeholders of the firm.

FIGURE 1 - Prices evolution of sit-down restaurants around the July 2009 reform



Note : This figure plots the evolution of the prices of sit-down restaurants around the July 2009 reform and compares it to a counterfactual had there been 100% pass-through of the VAT reduction.

Wages increased but less than expected by the Contrat d'avenir

The *Contrat d'avenir* clearly stipulated that 33% of the VAT cut should have been transferred to workers, instead they only captured 18.6% of the VAT cut as evidenced by an increase of 4.1%

of the cost of employees. In principle, the cost per employee can increase for two reasons: if the hourly wage increases or if the number of hours worked per employee increases. To disentangle the two effects we use survey data from the *Enquête Emploi en Continu (EEC)*[2] and find that the number of hours worked increased very little following the reform compared to hours worked in take-out restaurant or even other market services. Because cost of employees is a product of hourly wage and hours worked, this must mean that the hourly wage increased as a consequence of the VAT cut. We also test for whether the reform resulted in additional hiring of workers but find no evidence implying that restaurants did increase their number of employees.

FIGURE 2 - Impact of the reform on firms' performance

Note : This figure shows how value added, cost of employees, return to capital and profit and loss increased following the VAT reform relative to the control group.

The cost of intermediate inputs increased

Although it was not predicted nor agreed upon in the *Contrat d'avenir*, the cost of intermediate inputs increased substantially following the reform and we estimate that 12.1% of the VAT cut was transferred to the providers of intermediate inputs. Because we cannot observe quantities purchased of intermediate goods we cannot say whether this increase is due to increases in quantities purchased or increases in the prices of intermediate goods.

Firm owners gained the most from the reform

The VAT cut mostly benefited firm owners who captured 55.7% of the VAT decrease, which is larger than the 33% they were supposed to get. Profits remained higher in the sit-down restaurant sector relative to take-out restaurants for at least three years after the reform was implemented. This increase in profits is robust across both small and large restaurants and we find no differences between restaurants located in areas with a high density of restaurants compared to areas with few restaurants suggesting that competition does not directly affect how the VAT cut was passed-through to profits. We find however that new restaurants experienced larger profit increases compared to older restaurants. The difference in profits mostly stemmed from the fact that newer restaurants paid lower wages to their employees.

The January 2012 and January 2014 VAT increases

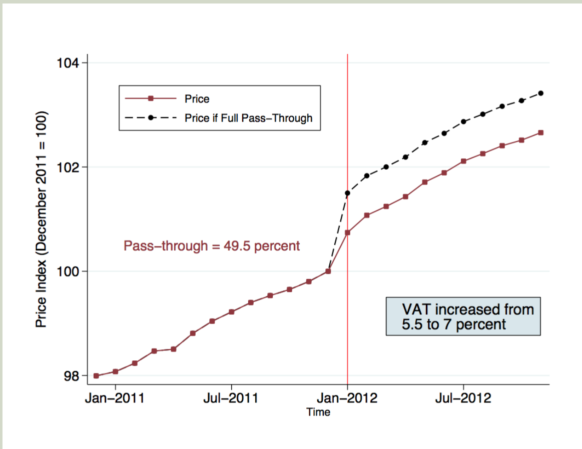
After the sit-down restaurants were reclassified into reduced VAT rate commodities, they were subject to two VAT increases that affected most reduced VAT rate commodities. Although these changes were not specific to the sit-down restaurant sector, they allow us to assess whether firms adjusted prices similarly to VAT rate increases and decreases.
The first VAT rate increase occurred in January 2012 increasing the rate by 1.5% point from 5.5% to 7%. As a response, prices increased by 0.75% which translates into a pass-through of 50%. We estimate similar magnitudes for the January 2014 increase: while the VAT rate increased by three percentage points to 10%, prices increased by 1.14% which is equivalent to a pass-through of the VAT increase of 38%.
Overall, these estimates suggest that restaurant owners increased their prices following the VAT increase four to five times more than they decreased their prices following the VAT decrease. In other words, although consumers benefited very little from the VAT decrease compared to restaurant owners, they paid relatively more for the VAT increase.

WHAT ARE THE POLICY IMPLICATIONS?

Is this specific to French Restaurants?

This asymmetry in the pass-through of VAT changes is neither specific to restaurants nor to France. Using all VAT changes from 1996 to 2015 in all sectors and countries of the European Union, we document that the asymmetric pass-through of VAT changes exists for a wide range of commodities in all European countries. For example we show that a

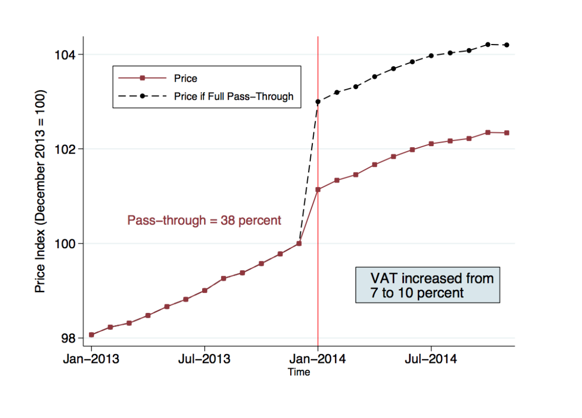
FIGURE 3 - Evolution of prices of sit-down restaurants around the January 2012 reform



Note : This figure plots the evolution of the prices of sit-down restaurants around the January 2012 reform and compares it to a counterfactual had there been 100% pass-through of the VAT reduction.

(2) See Lafféter Q., Sillard P. (2014) « L'addition est-elle mois salée? La réponse des prix à la baisse de TVA dans la restauration en France » for an alternative evaluation of the price decrease.

FIGURE 4 - Evolution of prices of sit-down restaurants around the January 2014 reform



Note : This figure plots the evolution of the prices of sit-down restaurants around the January 2014 reform and compares it to a counterfactual had there been 100% pass-through of the VAT reduction.

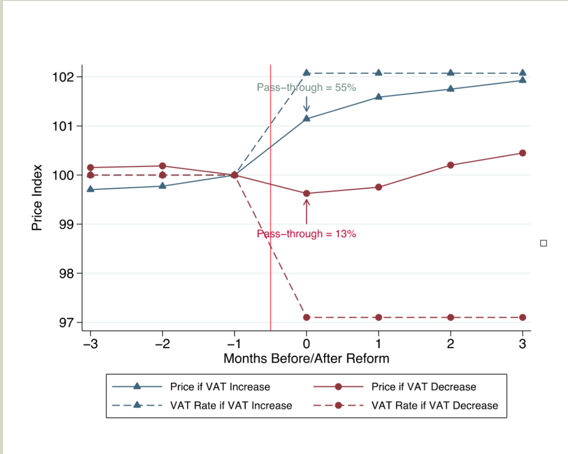
14% VAT decrease for hairdressing service in Finland 2007 led to a 40% pass-through. But when the VAT rate was increased for the same service in Finland by 14%, the pass-through was 79%. We also find very similar evidence regarding the evolution of profits for this sector: following the VAT cut, profits increased substantially and remained high relative to a control group. Once the VAT cut was repealed, profits decreased but remained higher than the control group, even three years after the VAT rate is re-established to its original level. In this case – and possibly because no agreement similar to the *Contrat d'avenir* was signed with hairdressers – we find very little effect on wage bills, instead the VAT cut mostly leads to an increase in profits.

What does the asymmetry imply about temporary VAT cuts?

First, because prices tend not adjust downwards, temporary VAT cuts are not a good measure to stimulate demand. They are desirable if the government[3] wants to stimulate supply by providing them with a transfer of money. However, ultimately the Government cannot control what firms will do with the windfall of money they receive as they can distribute it to their shareholders with no direct benefits to the economy.

Second, if the VAT cut is temporary and is supposed to be repealed once the economy recovers, our findings of asymmetric pass-through suggest that this might result in a higher equilibrium price and will end up being paid for by consumers. As an illustrative example, assume a VAT cut of 10% that lasts three years. If firms pass through 50% of the VAT decrease but 100% of the VAT increase to prices, then firms will receive a permanent windfall of 50% of the VAT decrease, consumers a three year long windfall of 50% which will be paid for by the Government through lower taxes. But once the VAT rate is increased, will stop receiving the 50% windfall and instead will start paying for the 50% windfall that firms are receiving through higher equilibrium prices. For this reason, a temporary VAT cut can hinder the demand side and is only desirable if the Government wants to permanently transfer money from consumers to firms.

FIGURE 5 - Responses of prices to VAT increases and decreases



Note : This figure aggregates all VAT changes that occurred in Europe from 1996 to 2015, and plots the response of prices to VAT increases versus VAT decreases. It shows that the pass-through of prices is larger for VAT increases than decreases.

What does our research imply about reduced VAT rates?

VAT rates are often implemented for commodities that are considered to be necessities and that are consumed disproportionally more by lower income individuals such as food and medication. The premise of having reduced VAT rates relies on the assumption that consumers bear most of the VAT incidence. If this assumption were correct, then reducing the VAT rate would mechanically result in lower equilibrium prices. However, our evidence implies that the assumption that VATs are mostly borne by consumers is inaccurate and therefore reduced VAT rates are unlikely to result in lower equilibrium prices. Instead, they will result in lower government revenue and will be particularly hard to increase because they will often lead to higher equilibrium prices, which generally affects low income households more than high income households.

(3) Benzarti, Y., D. Carloni, J. Harju and T. Kosonen (2018), «What Goes Up May Not Come Down: Asymmetric Incidence of Value-Added Taxes», No. w23849. National Bureau of Economic Research.

Reference study :

Benzarti, Y. and D. Carloni (2018), «Who Really Benefits from Consumption Tax Cuts? Evidence from a Large VAT Reform in France», *American Economic Journal: Economic Policy*, forthcoming.

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