

# Effects of increased VAT rates for ornamentals

Study for VBN

18 May 2022, Michiel van Galen



# A brief history of the study

- Ornamentals are under the reduced VAT rate in the Netherlands since 1975
  - To make flowers and plants accessible for everybody
  - To stimulate employment and growth in an important economic sector
- Many other EU member states also have reduced rates
- Over the past 20 years, Wageningen Economic Research has studied the effects of the reduced rates several times: the results have been used by VBN to argue for the continuation of the policy

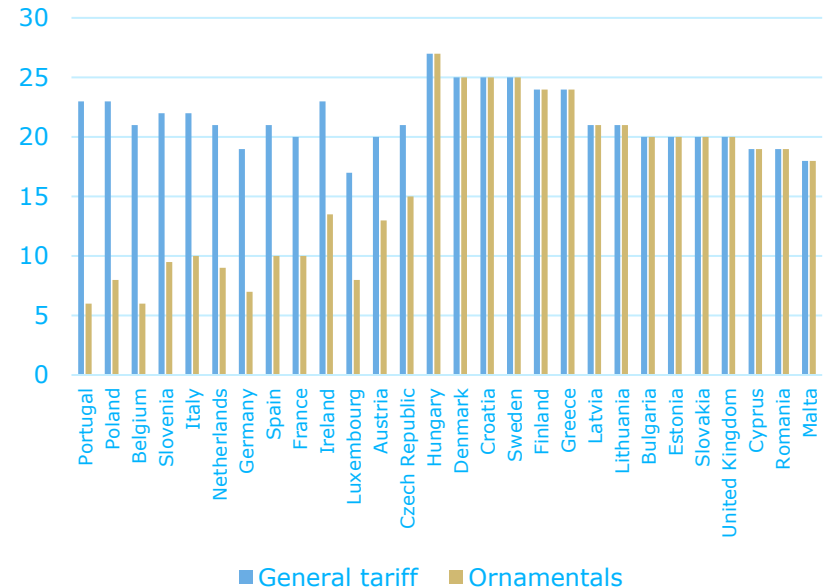
# Research questions

- Calculation of the effects on employment and turnover of an increase in VAT rates applied to ornamentals, for 3 scenarios:
  1. A unilateral increase of VAT in the Netherlands, from the current 9% to the general 21% rate
  2. An increase in VAT in all other EU member states currently applying a reduced rate
  3. An increase in the Netherlands and all other EU member states
- Calculation of the effects on government finances in the Netherlands

# VAT rates applied

- Reduced rate in 13 MS
- Rates have changed in some MS
- Notably in:
  - Spain in 2012-2015
  - France in 1991-1993

Figure 1: VAT rates in EU member states and UK (situation 2019)



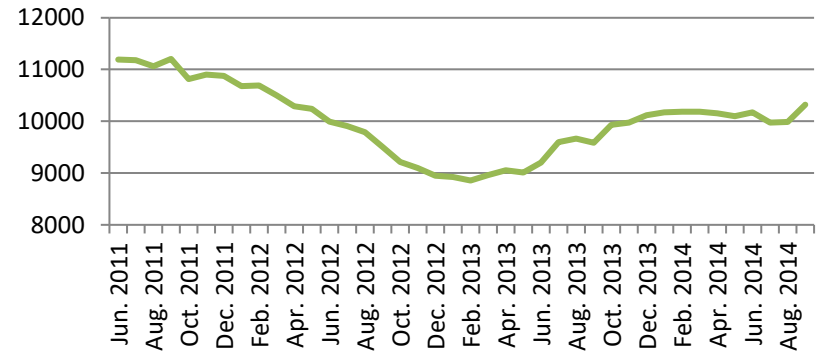
Source: European Commission, taxud.c.1 (2019) - EN.

[https://ec.europa.eu/taxation\\_customs/sites/taxation/files/resources/documents/taxation/vat/how\\_vat\\_works/rates/vat\\_rates\\_en.pdf](https://ec.europa.eu/taxation_customs/sites/taxation/files/resources/documents/taxation/vat/how_vat_works/rates/vat_rates_en.pdf)

# Case of Spain 2012-2015

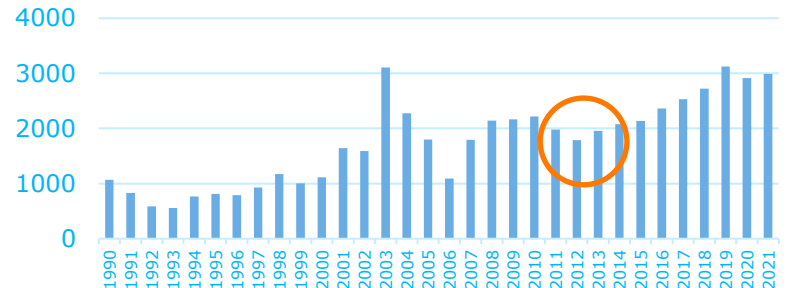
- Rates were increased from 8 to 21% in July 2012
- Decrease in retail sales between 2012 and 2014 (~25%)
- Initial decrease in imports (~15%)
- Decrease in production value between 2011 and 2012 (~10%) and employment

**Figure 2: Spanish imports of ornamentals from the Netherlands, 12-month moving average, in 1000 EUR. Source: AEFI, Eurostat.**



**Figure 3: Production value of Flowers and plants in Spain, in mln EUR.**

Source: Eurostat.



# Methodology

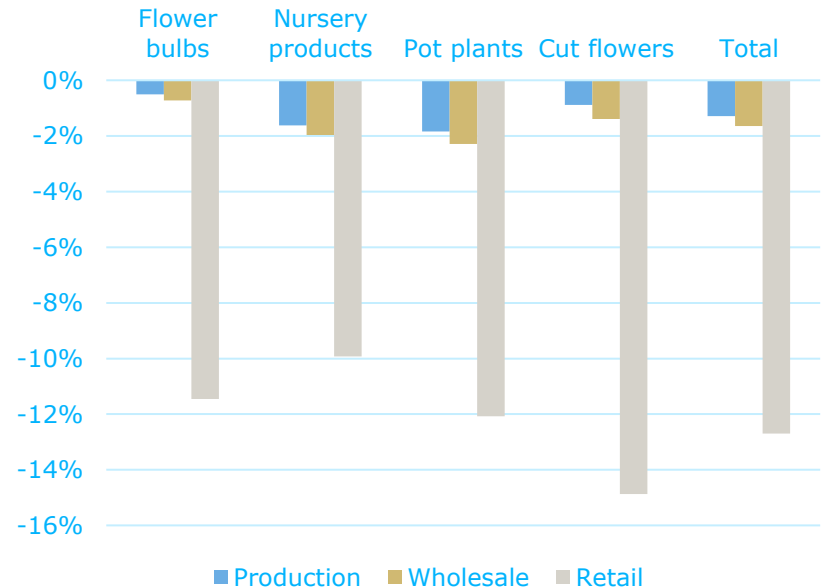
- Partial equilibrium model of EU and UK horticultural supply and demand
- Database of production, international trade, consumption, production technology, elasticities of substitution, income and prices
- Price elasticities of demand: new research by GfK
  - cut flowers: -1,6
  - indoor plants: -1,3
  - garden plants: -1,3
  - flower bulbs: -1,5

# Results for scenario 1

- Increase of VAT in the Netherlands from 9% to 21%: consumer prices increase by 11%
- Negative effect on retail (-420 Mln EUR) and total loss of 2,800 jobs
- Relative effect on turnover and employment for wholesale and production is limited because of the importance of exports

Figure 4: Results for scenario 1, effects of VAT increase in the Netherlands, in

% of turnover and employment



# Results for scenario 2 and 3

- 4.7-5.1 Bln EUR loss of turnover at retail level in EU and UK
- 50-54 thousand jobs
- Largest relative effects in countries with highest price increase

**Table 1: Effects on turnover and employment, scenario 3**

	Turnover, %			Turnover, mln EUR			Employment, fte		
	Production	Wholesale	Retail	Production	Wholesale	Retail	Production	Wholesale	Retail
Germany	-11	-12	-13	-230	-700	-1.620	-3.040	-1.340	-11.760
Italy	-11	-11	-12	-300	-490	-1.020	-3.550	-1.190	-3.130
Netherlands	-7	-7	-12	-430	-780	-400	-2.890	-1.120	-1.990
France	-9	-9	-10	-170	-390	-890	-2.260	-1.000	-4.500
Spain	-11	-11	-12	-130	-200	-390	-2.620	-1.280	-2.580
Poland	-12	-13	-15	-50	-130	-300	-2.090	-670	-2.520
Belgium	-10	-12	-17	-20	-110	-150	-130	-170	-360
Rest van EU-27 en VK	-1	-1	-1	-120	-320	-510	-3.080	-1.330	-3.430
Totaal	-8	-8	-9	-1420	-3.030	-5.130	-19.530	-7.930	-29.910



# Effects on government finances

- Increase government VAT tax revenues
- But:
  - Lower effect due to decrease in sales
  - Lower income tax revenues and social contributions
  - Higher unemployment benefit costs
- And, negative effect on affordability of flowers and plants

# Thank you

Questions?

