

# Controlling public health expenditures: assessment of governance tools as a public policy

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# A problem

## PORTUGAL

### MEMORANDUM OF UNDERSTANDING ON SPECIFIC ECONOMIC POLICY CONDITIONALITY

17 May 2011

#### **Public Financial Management framework**

To strengthen the public financial management framework the Government will take the following measures:

#### *Reporting*

- 3.1. Approve a standard definition of arrears and commitments.<sup>10</sup> [Q2-2011]
- 3.2. Conduct and publish a comprehensive survey of arrears by **end-August 2011** covering all categories of expenditure payables as at the end of June 2011. All general government entities and SOEs classified outside the general government will be covered by this survey.<sup>11</sup>
- 3.7. Following the survey, prepare a consolidated monthly report on arrears for the general government sector. The general government perimeter will be defined as in national accounts. [Q3-2011]

#### *Hospital services*

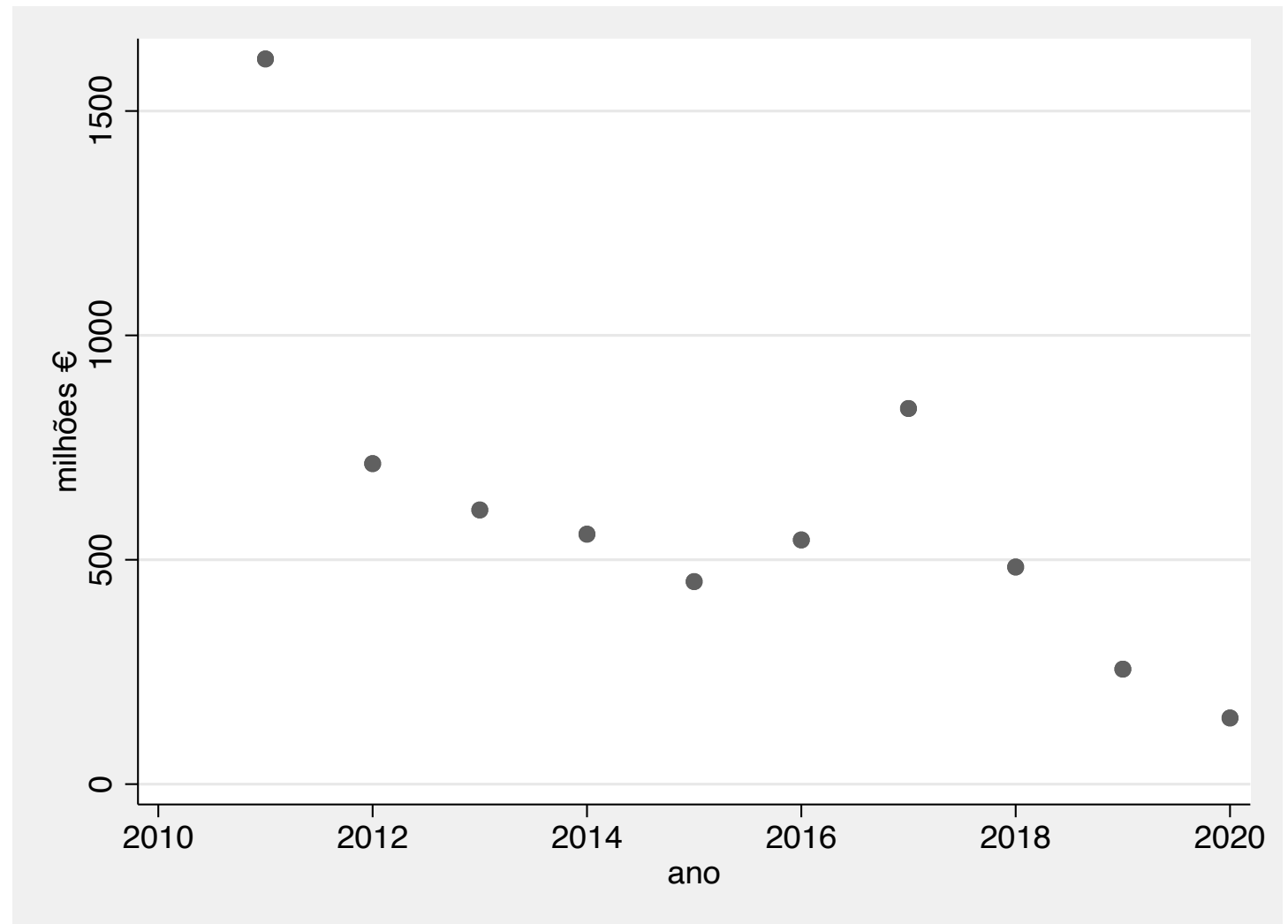
- 3.71. Set out a binding and ambitious timetable to clear all arrears (accounts payable to domestic suppliers past due date by 90 days) and introduce standardised commitment control procedures for all entities to prevent the re-emergence of arrears. [Q3-2011]

# A reality

NHS Hospital  
arrears – end of  
year stock

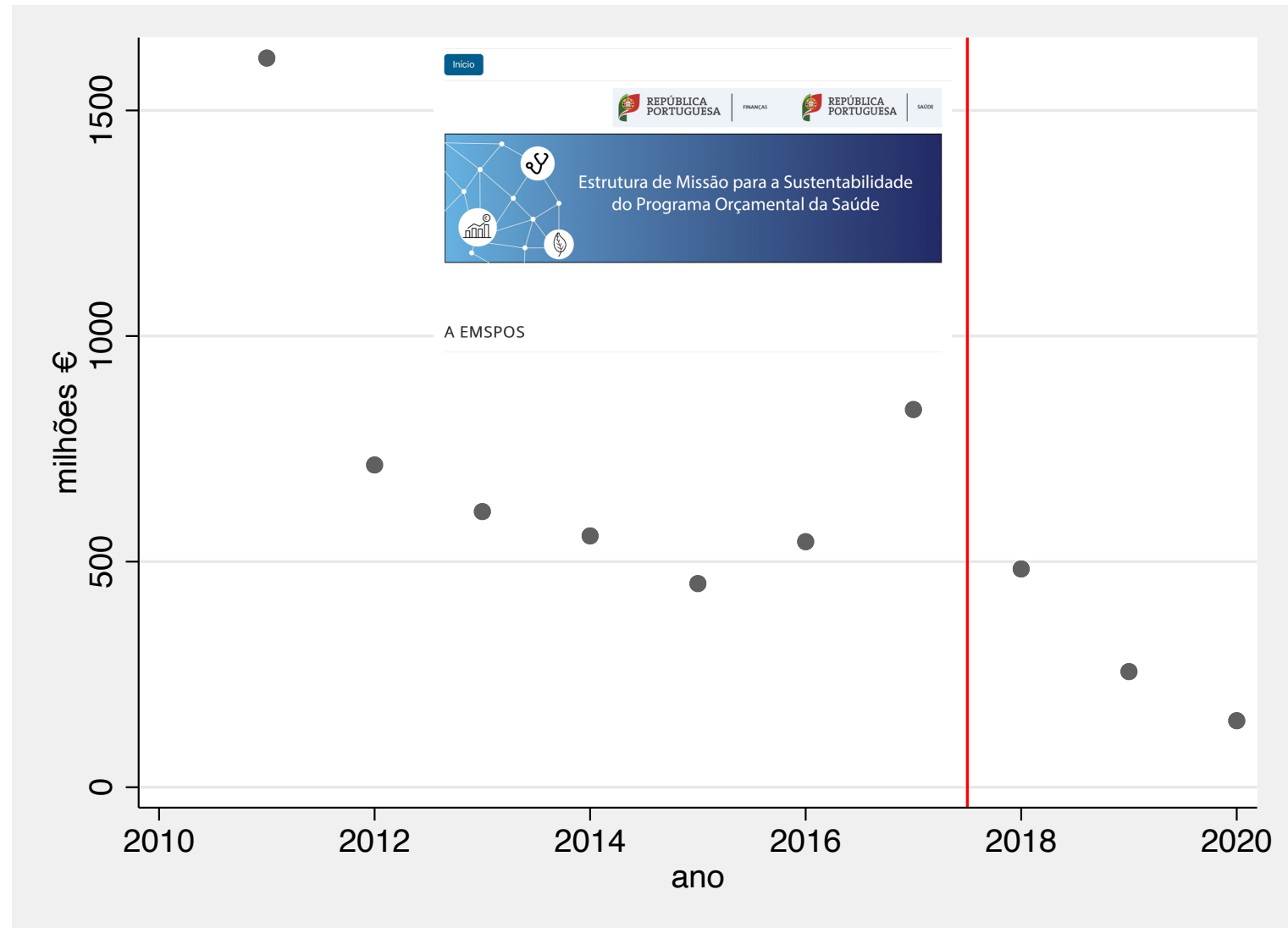
An enduring  
problem, but  
improving in  
recent years

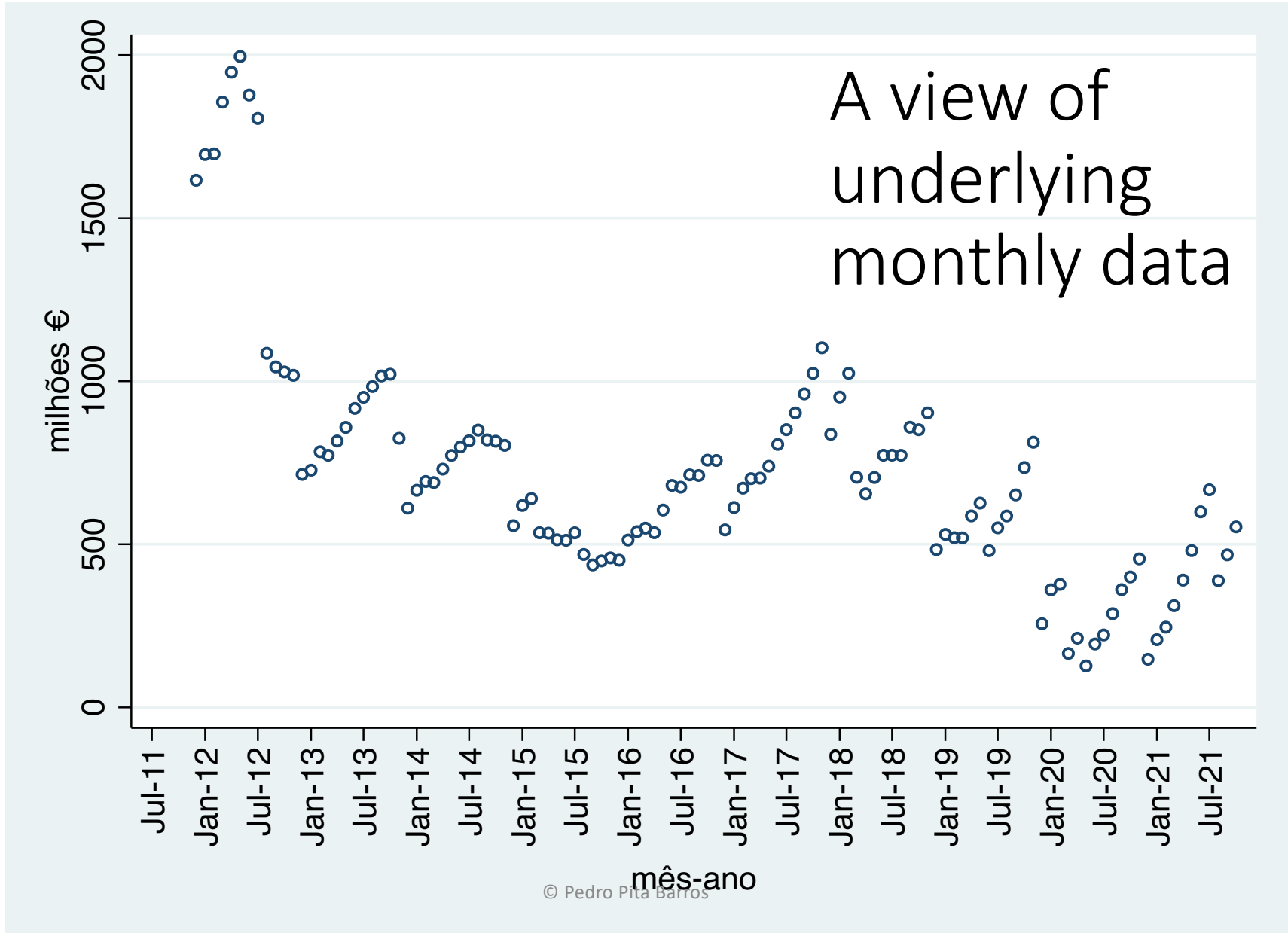
Source: DGO – the monthly  
reports! [www.dgo.gov.pt](http://www.dgo.gov.pt); last  
available data: 25 Nov 2021  
(Dec 2011 - Oct 2021)



# What happened?

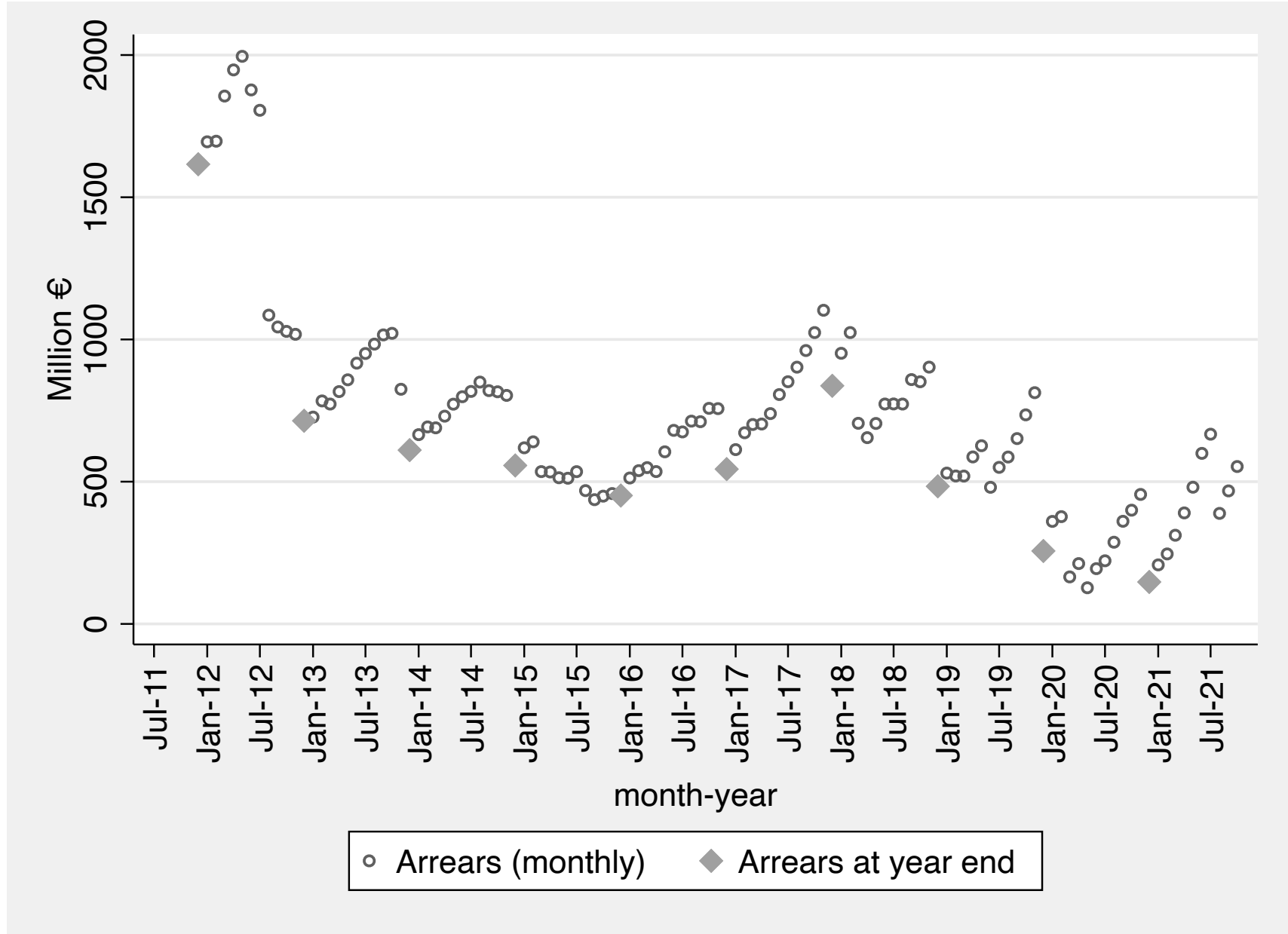
- Creation in March 2018 of EM-SPOS
- Joint task force MoF & MoH to monitor hospital expenditures
- Did it work?





Putting together the two graphs:

- End of the year stocks are not representative
- Pattern of injecting money to “look good”
- But dynamics are very different
- Cycles of throwing money, stock lowers, keeps growing until new money is dropped on it, stock lowers, etc



# Pause for a moment:

- Looking at end-of-year arrears suggested the problem of arrears was becoming under control after 2018
- the task force EM-SPOS started operations in 2018
- Therefore, the task force successfully tackled the issue!
- BUT, looking at monthly data we have a totally diferente story
- Yearly (end-of-year) data give a misleading picture – the true dynamics are hidden behind significant public money transfers!
- The **relevant question**: have the dynamics changed after the EM-SPOS?

# A “qualitative” assessment

- “...received with enthusiasm the appointment in 2018 [to EM-SPOS] (...) they produced a lot and none was used. (...) no real intention to change (...) the ministers did not communicate” (interview, Sábado, November 2021)
- The EM-SPOS produced several recommendations (2018/2019) aimed at
  - Improving hospital efficiency (thus lowering the growth rate of expenditures, and consequently of arrears, everything else constant)
  - Providing money in a smoother way over time to avoid moral hazard, short-run decision making and price inflation in hospital drugs (pharma companies are the main creditors – “owners” of arrears)
  - In 2019, supported the use of a plan to pay arrears, with committed money, to make it easier to manage hospitals
  - Improve the internal audit of hospitals



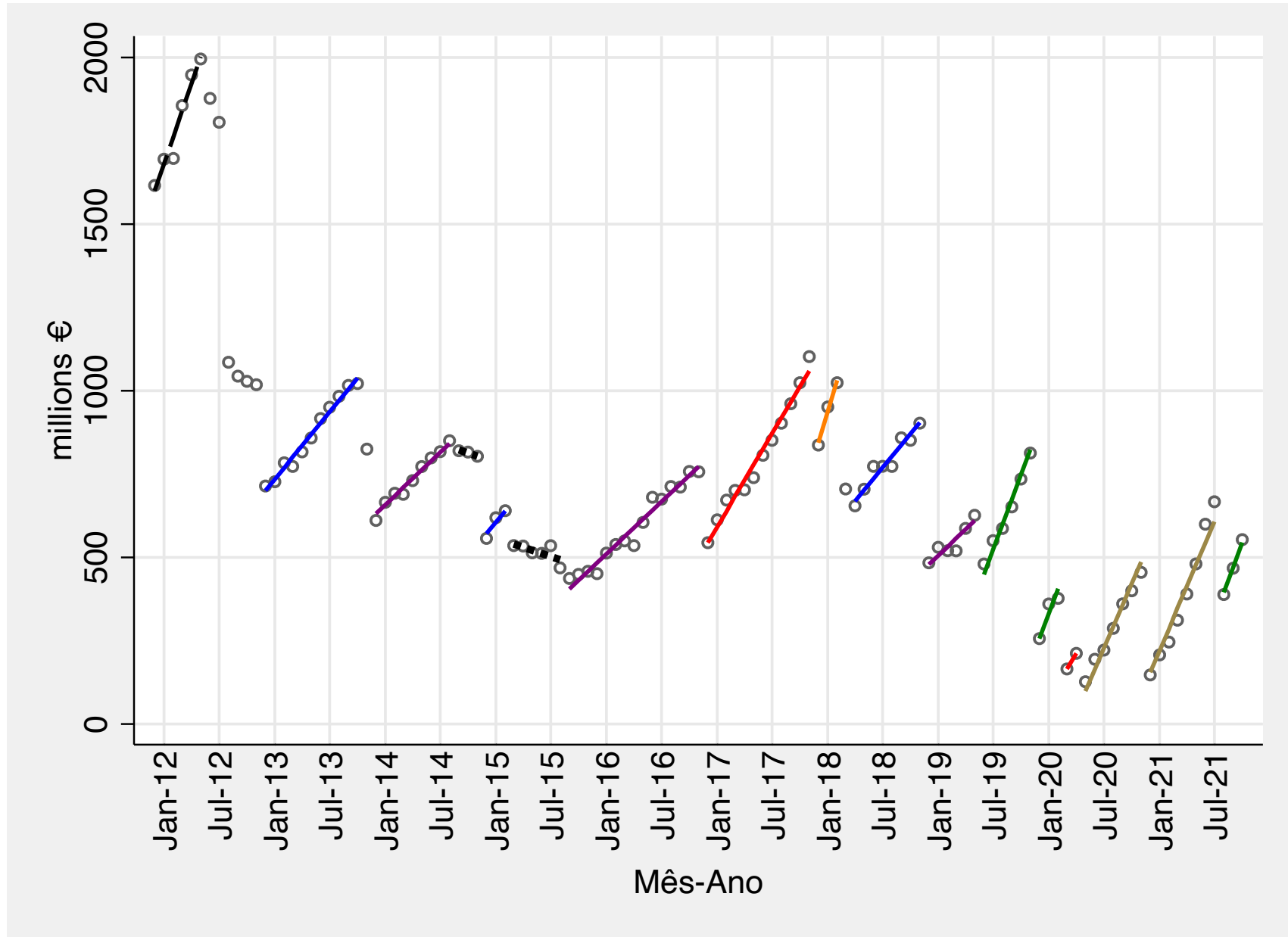
# A “quantitative” view

- We need to account for the “rollercoaster” nature of the data
- Regression analysis to describe the data

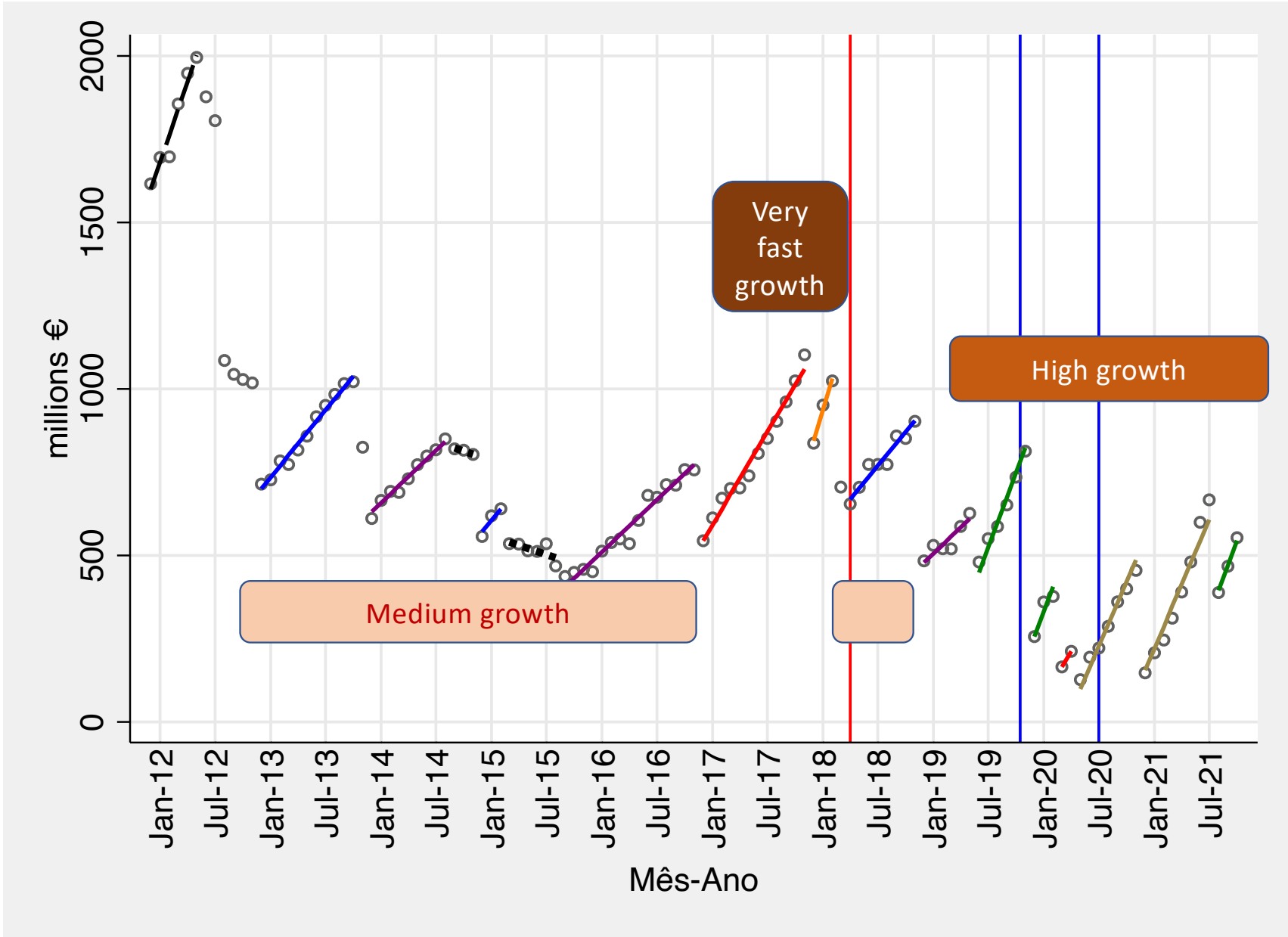
$$y_t = \sum_i \alpha_i + \sum_k \beta_k t + \varepsilon_t$$

where constants absorb changes / breaks / transfers and where the different trend slopes are tested to be equal across periods when estimated values are not too different (less than 2 S.E.)

How the predicted values look like  
(same color means equal trend)



Adding the EM-SPOS key moments:  
1. creation  
2. first renewal of mandate  
3. second renewal of mandate



# Using a simple model

- Adding trend effects associated with
  - creation: March 2018 – October 2019
  - First renewal: November 2019 – June 2020
  - Second renewal: July 2020 –
  - Pandemic – March 2020 –

$$y_t = \sum_i \alpha_i + \sum_k \beta_k t + \sum_j \theta_j D_j \times t + \varepsilon_t$$

- $D_j$  are dummies associated with these effects

# The results

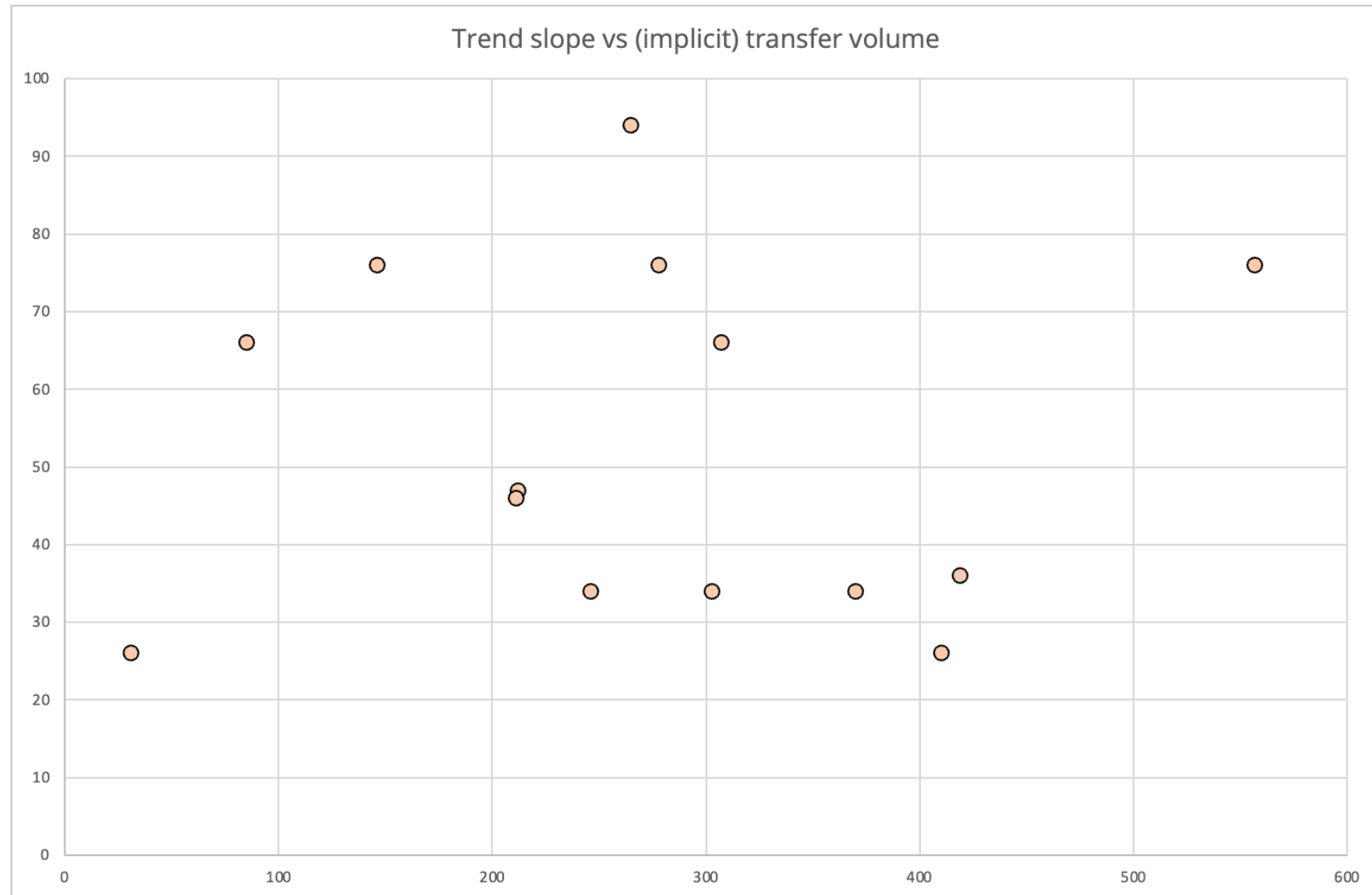
	No EM-SPOS	EM-SPOS	EM-SPOS + pandemic
EM-SPOS	-1.48 (-0.59)	-1.48 (-0.58)	-1.51 (-0.59)
EM-SPOS II		-0.23 (0.17)	-0.22 (-1.27)
EM-SPOS III		-0,46 (-3.37)	<b>-0.46 (-3.27)</b>
Pandemic			+3.80 (1.01)
Trend 1	80.42 (17.66)	80.42 (17,47)	80.42 (17.37)
Trend 2	-190.55 (-4.65)	-190.55 (-4.60)	-190.55 (4.58)
Trend 3	34.13 (22.27)	34.13 (22.03)	34.14 (21.07)
Trend 4	26.30 (23.13)	26.30 (22.88)	26.30 (22.74)
Trend 5	-9.39 (-2.02)	-9.39 (-2.00)	-9.39 (-1.99)
Trend 6	46.82 (19.66)	46.82 (19.45)	46.81 (19.31)
Trend 7	93.57 (16.80)	93.57 (16.62)	93.57 (16.53)
Trend 8 (2019 + 2nd half 2021)	76.36 (15.62)	80.35 (15.27)	80.26 (24.94)
Trend 9 (Q2 2020 – 1st half 2021)	66.06 (14.52)	70.19 (13.93)	66.30 (7.90)

Could it be that more M€ means slower future growth?

No relation with all data points

With max and min removed: slope = - 0.11

Does not account for how long the trend lasts



- Different result on the transfer effect
- But last period slowdown is still there

	w/ bailout	EM-SPOS + pandemic
EM-SPOS	-3.51 (-1.28)	-1.51 (-0.59)
EM-SPOS II	-0.16 (-1.04)	-0.22 (-1.27)
EM-SPOS III	<b>-0.40 (-3.15)</b>	<b>-0.46 (-3.27)</b>
Pandemic	4.49 (1.28)	+3.80 (1.01)
Transfer x trend	<b>0.012 (2.22)</b>	
Trend 1	80.42 (17.27)	80.42 (17.37)
Trend 2	-190.55 (-4.65)	-190.55 (4.58)
Trend 3	30.58 (13.35)	34.14 (21.07)
Trend 4	24.95 (18.39)	26.30 (22.74)
Trend 5	-9.39 (-1.98)	-9.39 (-1.99)
Trend 6	44.10 (16.20)	46.81 (19.31)
Trend 7	90.18 (5.90)	93.57 (16.53)
Trend 8 (2019 + 2nd half 2021)	78.21 (15.36)	80.26 (24.94)
Trend 9 (Q2 2020 – 1st half 2021)	64.46 (8.25)	66.30 (7.90)

# What about the magnitudes?

- After the extra funds in August, monthly growth of arrears is about 80M€/month
- Before the extra funds, the growth was about 66M€/month
- The effect of the EM-SPOS
  - Zero effect until June 2020
  - Small reduction in growth rate (0.5M€/month) – 6M€/year – quite small effect, can we really link it to EM-SPOS? Delay in starting to take effects?



# Concluding remarks

- **The relevant question:** have the dynamics changed after the EM-SPOS?
- Not much, but some effect seems present with delay
- (not clear we can establish causality)
  
- What else can we do?
  - Look at dynamics of individual hospitals
  - Compare to spending dynamics in other areas of Government? – but none has the same sort of “rollercoaster” pattern
  - More ideas?
  
- Send comments, questions, suggestions to [ppbarros@novasbe.pt](mailto:ppbarros@novasbe.pt)