

Measuring fiscal guidance transparency

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What this paper is about

This paper measures the extent to which governments are transparent in disclosing their own expectations about the future fiscal and economic outlook – **fiscal guidance**

Table 4.3.1.1. Budgetary prospects
Excessive Deficit Procedure

Table 1: Macroeconomic prospects			2011	2011	2012	2013	2014	2015	2016
	ESA Code	in bn €	Rate of change in %						
1. Real GDP	B1*g	271.3	3.1	0.4	1.4	2.0	2.2	2.1	
2. Nominal GDP	B1*g	301.3	5.3	2.2	2.9	3.6	3.8	3.8	
Components of real GDP									
3. Private consumption expenditure	P.3	143.2	0.6	0.8	0.9	1.0	1.1	1.2	
4. Government consumption expenditure	P.3	50.7	2.7	-1.0	-1.0	0.3	0.2	0.3	
5. Gross fixed capital formation	P.51	54.6	5.7	1.1	2.0	2.5	2.9	3.2	
6. Changes in inventories and net acquisition of valuables (% of GDP)	P.52 + P.53		2.9	2.7	2.8	2.9	3.0	3.0	
7. Exports of goods and services	P.6	155.4	6.7	3.3	5.9	6.7	6.6	6.0	
8. Imports of goods and services	P.7	137.1	7.0	3.2	5.0	5.8	5.7	5.4	
Contributions to real GDP growth									
9. Final domestic demand			2.0	0.5	0.7	1.2	1.3	1.5	
10. Changes in inventories ¹⁾	P.52 + P.53		0.9	-0.2	0.1	0.1	0.1	0.0	
11. External balance of goods and services	B.11		0.2	0.2	0.6	0.8	0.8	0.6	

1) Incl. net acquisition of valuables and statistical discrepancy
Positions may not sum up due to rounding errors.
Sources: BMF, STAT, WIFO

Guidance in the form of numerical, point forecasts on individual items over several forecast horizons

Contribution

Three contributions:

1. A [comprehensive](#) dataset of numerical forecasts disclosed by up to 28 countries over up to 18 years
2. A measure of transparency based on the quantity of forecasts issued by each country - the "Fiscal Guidance Transparency" index ([FGT index](#))
3. Preliminary analysis of the [characteristics](#) and [correlates](#) of the FGT index

Motivation

A measure of fiscal guidance transparency is important for both **theoretical** and **empirical** reasons



<https://it.depositphotos.com/11820545/stock-photo-uncertain-future.html>



<https://www.managementors.co.uk/future-proofing-your-business-in-an-uncertain-future/>



<https://pastorlisaj.com/2018/06/25/sundays-sermon-the-gift-of-uncertainty/>

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The Causes of Fiscal Transparency: Evidence from the U.S. States

JAMES E. ALT, DAVID DREYER LASSEN, and SHANNA ROSE*

IMF Working Paper

**Trends in Fiscal Transparency: Evidence from a New
Database of the Coverage of Fiscal Reporting**

by Rachel F. Wang, Timothy C. Irwin, and Lewis K. Murara

Measuring Transparency

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Citizens, Legislators, and Executive Disclosure: The Political Determinants of Fiscal Transparency

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Contents lists available at ScienceDirect

Journal of Comparative Economics

journal homepage: www.elsevier.com/locate/jce



A global index of information transparency and accountability

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Institutional setting and data

I exploit a feature of the EU setting: the Stability and Growth Pact (SGP)

The SGP has been widely studied, e.g., to measure fiscal forecast accuracy and the real and accounting effect of fiscal rules (Frankel and Schreger 2013; Alt et al. 2014)

However, few have exploited the fact that the SGP included:

- [Mandatory annual reporting](#) of Stability/Convergence Programme (SCP)
- [Voluntary disclosure provisions](#) – up to 160 items between 2001 and 2018

Mandatory reporting derives from Articles 4 and 7 of the first SGP Regulation (1997)

Voluntary disclosure derives from the Codes of Conduct on the format and content of SCPs

Institutional setting and data

The institutional setting allows to observe:

Whether a government publishes a fiscal plan (SCP), and at which date

- Allows studying questions of delays/bargaining

Whether a fiscal plan (SCP) contains many or few of the forecasts required by the SGP Codes of Conduct

- Allows studying question of voluntary disclosure, capacity, change in disclosure policy, determinants of transparency...

Crucially (Cicatiello et al. 2017), these questions can be answered using panel data methods, because we observe the reporting/disclosure choices of up to 28 EU governments over multiple years (and forecast horizons)

Institutional setting and data

I collect all the 434 SCPs published between 2001 and 2018

These contain up to 117 unique items on which a forecast was issued (1,674 observations, up to 28 governments)

Each forecast is available at 1 lag and 4 forecast horizons beginning with the SCP publication year

The format of the SCP changes in line with the Codes of Conduct. However, **the format is the same for all EU governments at any given vintage**

Therefore, it is possible to construct a measure of transparency at the government-vintage-forecast horizon level based on item-level disclosure

Institutional setting and data

In particular, I organize data from the SCP according to the [structure](#) provided in the Code of Conduct (CoC) applicable to each vintage (

CoCs have regulated the [rules for presentation and](#) mandatory items that SCPs should contain

The number of voluntary items that countries should disclose has increased from 93 to 161

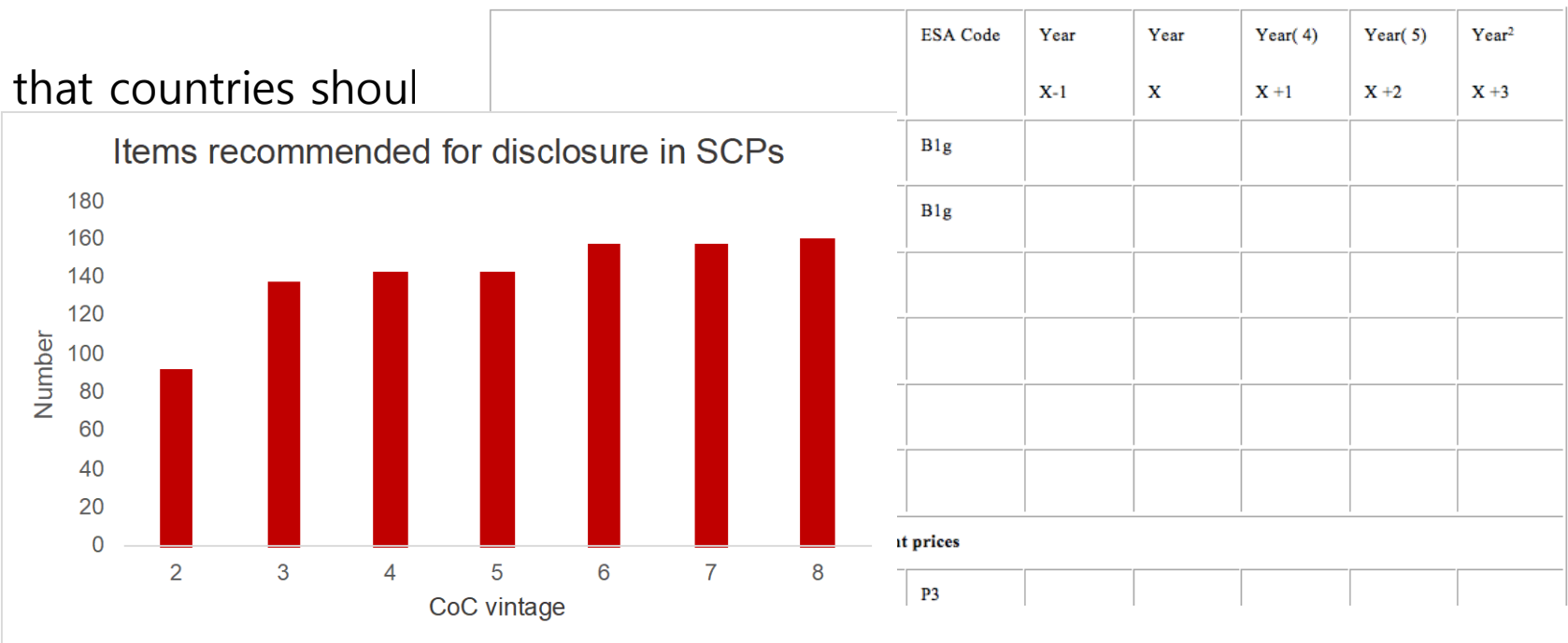
ANNEX 1

Tables to be contained in the SCP updates

Provision of data on variables in bold characters is a requirement.

Provision of data on other variables is optional but highly desirable.

Table 1. Growth and associated factors



Institutional setting and data

TABLE 3

Differences in event dates

	(1)	(2)	(3)
Constant	1.47 [1.14]	0.66 [0.75]	3.09*** [0.77]
R-squared	0.030	0.011	0.124
Observations	73	123	203
Cluster	Country	Country	Country

Note: This table reports the results of an intercept-only OLS regression that tests whether there are significant differences in the dates at which governments approve, submit, and publish their Stability/Convergence Programmes. Column 1 reports the difference between the publication date reported by the government and that reported by the press. Column 2 reports the difference between the date at which the government approves the SCP and the publication date. Column 3 reports the difference between the date at which the government submits the SCP to the European Commission and the publication date. Standard errors in brackets are clustered at the dimension indicated at the bottom of the table. ⁺ $p < 0.10$, ^{} $p < 0.05$, ^{**} $p < 0.01$, ^{***} $p < 0.001$.*

Institutional setting and data

At the end of the data collection process, the dataset appears as a (unbalanced) panel dataset with up to 28 countries on the c dimension and up to 18 years on the t dimension

Note:

The t dimension really is a day d dimensions, corresponding to the publication day

- Therefore, there may be **multiple (or no) SCPs** published by country i in year t

Each SCP includes forecasts on each item i at up to 4 forecast horizons k

- Therefore, **each country-day (c, d) dyad nests up to 4 observations**

Creating the fiscal guidance transparency (FGT) index

I use these data to create the [FGT index](#), which measures the transparency with which countries disclose their expectations/plans for the future fiscal and economic outlook as:

$$FGT_{c,k,d} = 100 * (\frac{1}{R} \sum_{i=1}^R i_{c,k,d})$$

With $i \in (0,1)$ denoting the presence or absence of a forecast that the CoC applicable to day d submissions recommended to disclose

The same procedure is used to calculate [four sub-indices](#) that measure transparency in the disclosure of forecasts on:

1. The economic outlook
2. The fiscal outlook
3. The debt outlook
4. Assumptions

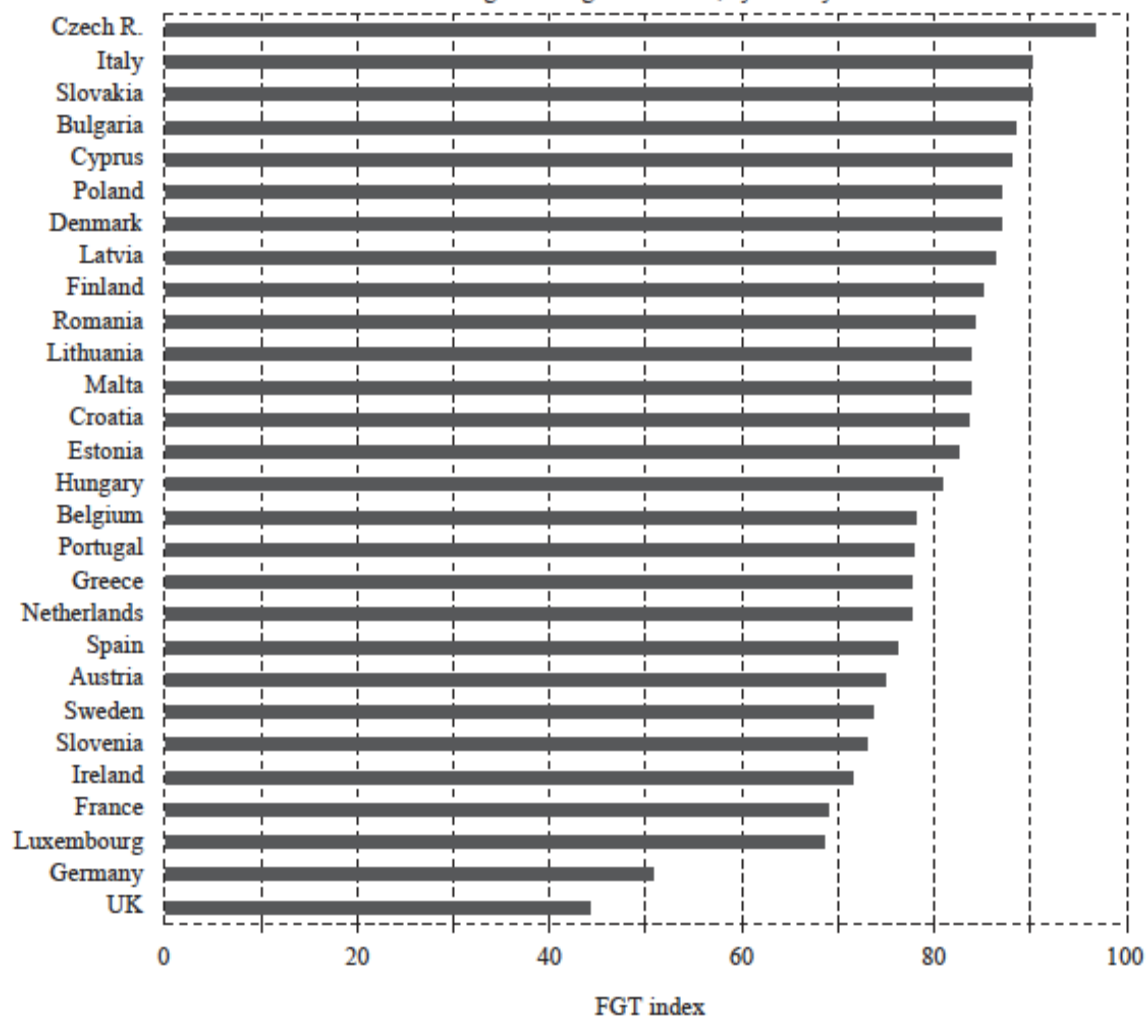
Guidance events cluster in typical months/quarters

Publication year	N	Publication quarter	N	Publication month	N	Publication day	N
		1	61				
2001	14			1	36	Monday	60
2002	12	2	225	2	13	Tuesday	71
2003	17	3	2	3	12	Wednesday	100
2004	33	4	146	4	189	Thursday	109
2005	27	<i>Total</i>	434	5	31	Friday	94
2006	27			6	5	<i>Total</i>	434
2007	31			7	0		
2008	18			8	1		
2009	18			9	1		
2010	25			10	6		
2011	27			11	58		
2012	27			12	82		
2013	25			<i>Total</i>	434		
2014	26						
2015	26						
2016	27						
2017	27						
2018	27						
<i>Total</i>	434						

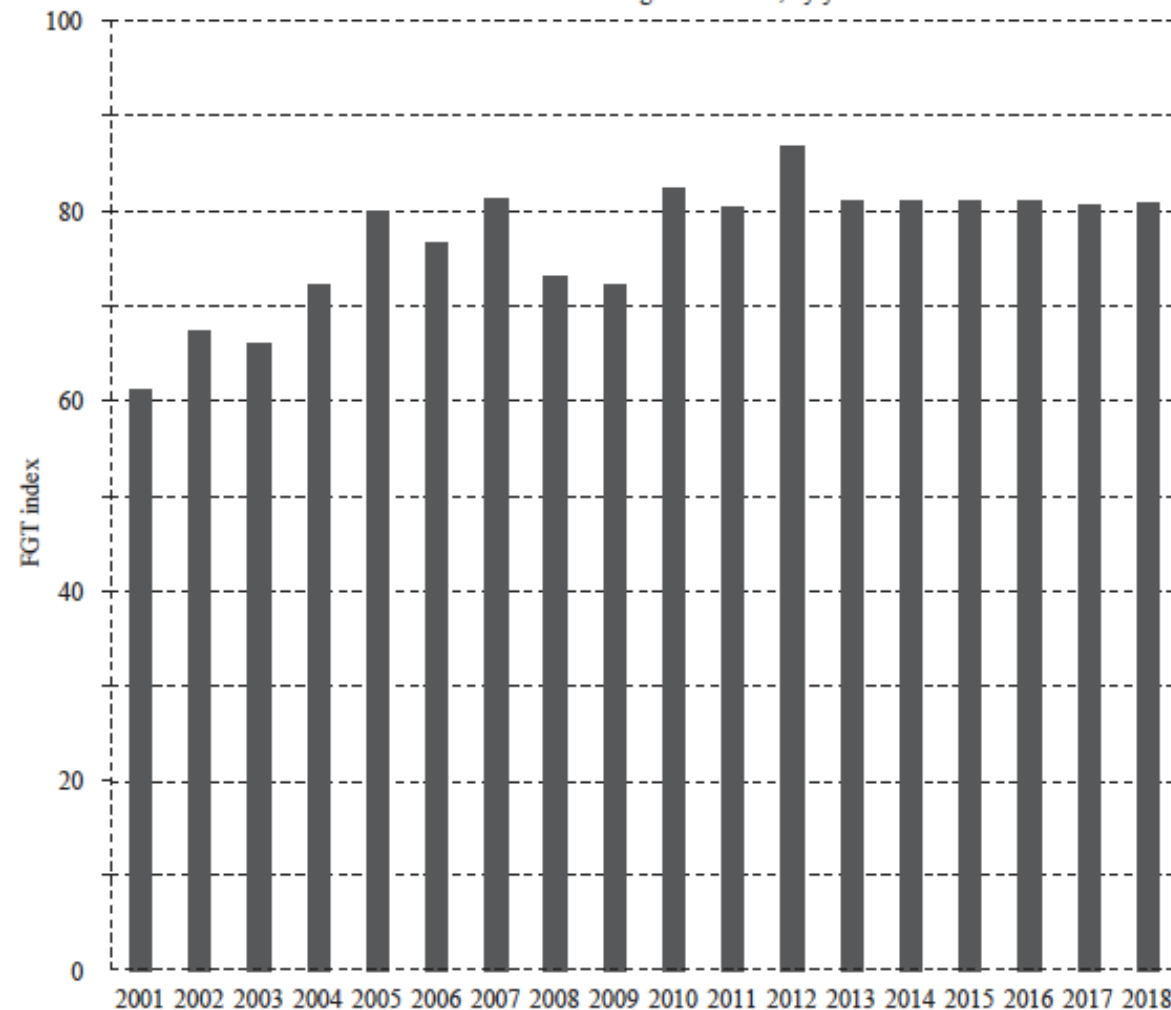
This table shows the distribution of all Stability/Convergence Programmes (SCP) in the sample by year, quarter, month and day of publication.

Transparency varies across countries and years

Panel A: Ranking of average FGT index, by country



Panel B: Evolution of the average FGT index, by years



Transparency is lowest on forecasts on assets and liabilities

TABLE 6

Summary statistics of the fiscal guidance transparency index

Variable	Mean	St. dev.
<i>FGT</i>	78.12	15.87
<i>Economic outlook</i>	85.42	19.00
<i>Fiscal outlook</i>	87.31	16.69
<i>Debt outlook</i>	54.93	25.11
<i>Assumptions</i>	61.82	34.37

Note: This table provides summary statistics of the FGT index and of the sub-indices of FGT that measure transparency in the release of forecast of coherent items. FGT is defined in equation (1). Minimum and maximum values are 0 and 100, respectively, for all variables. N=1674.

Transparency declines in the forecast horizon

	(1)
	FGT
<i>Forecast horizon $t+k=1$</i>	-0.78 ^{***}
	[0.21]
<i>Forecast horizon $t+k=2$</i>	-2.74 ^{**}
	[0.96]
<i>Forecast horizon $t+k=3$</i>	-4.11 ^{***}
	[1.00]
<i>Intercept (Forecast horizon $t+0$)</i>	65.25 ^{***}
	[2.99]
N	1674
Adj. R2	0.62
Country FE	Yes
Year FE	Yes
Cluster	Country & Date

Levels of guidance transparency are in the hands of government

	(1)	(2)	(3)	(4)
<i>Government Strength</i>	-0.42 [*] [0.15]	-0.16 ⁺ [0.08]	-0.42 ^{**} [0.15]	-0.16 ⁺ [0.08]
<i>Fragmentation of Parliament</i>	0.31 ⁺ [0.17]	-0.35 ⁺ [0.16]	0.31 ⁺ [0.17]	-0.35 ⁺ [0.16]
<i>Electoral Pressure</i>	0.44 [0.59]	0.30 [0.31]	0.44 [0.57]	0.30 [0.30]
<i>Democracy</i>	1.17 [1.96]	5.39 [3.35]	1.17 [1.90]	5.39 ⁺ [3.17]
<i>GDP per capita</i>	-10.92 ^{**} [3.92]	-8.77 [9.89]	-10.92 ^{**} [3.82]	-8.77 [9.24]
<i>Debt</i>	0.12 ⁺ [0.06]	-0.06 [0.08]	0.12 ⁺ [0.06]	-0.06 [0.08]
<i>Budget Balance</i>	0.95 ⁺ [0.47]	0.28 [0.22]	0.95 ⁺ [0.46]	0.28 [0.21]
<i>Trade</i>	0.04 [0.03]	-0.04 [0.05]	0.04 [0.03]	-0.04 [0.04]
<i>EU Funds</i>	0.66 [0.71]	-0.96 [0.77]	0.66 [0.69]	-0.96 [0.73]
<i>Euro Adopter</i>	-1.36 [5.23]	3.54 [2.72]	-1.36 [5.07]	3.54 [2.77]
<i>Constant</i>	157.53 ^{***} [40.26]	147.29 [108.15]	157.53 ^{***} [39.34]	147.29 [102.85]
N	1,469	1,469	1,469	1,469
Adj. R2	0.31	0.64	0.31	0.64
Country FE	No	Yes	No	Yes
Year FE	Yes	Yes	Yes	Yes
Horizon FE	Yes	Yes	Yes	Yes
Cluster	Country	Country	Country & Date	Country & Date

Limitations

The FGT index does not claim to be a perfect measure of transparency

- It measures a EU phenomenon
- It only measures SCP forecasts (not considering EDP forecasts, for instance)
- It contains some (inevitable?) measurement error and instances of judgment
- It measures guidance 'intensity' rather than 'quality'

The fiscal guidance transparency index captures a **forward-looking** form of governmental disclosure

- It complements recent efforts to measure the degree of (fiscal) transparency based on either **outcomes** or **processes**
- It has the benefit of covering several countries and years, while being “**matchable**” with other data available at daily, weekly, monthly, quarterly, or yearly level, as well as with political datasets

I hope that the paper will encourage research along the following lines:

- Can guidance transparency **backfire**? (Prat 2005; Laffont and Tirole 1992)
- To what extent is there a **demand** for governments’ forecasts? (Columbano & Trombetta 2022)
- What is the capital market **effect** of fiscal guidance? (Alt 2021; Columbano & Bafundi WP; Mosley, Paniagua and Wibbels 2020; Pástor and Veronesi 2012)
- Why do some governments **delay** the publication of their SCPs (Alt and Lowry 1994; Andersen, Lassen and Nielsen 2014; Edmonds et al. 2017)
- Is there a relation between guidance transparency and **accuracy**? (Penno 1997)
- Is guidance transparency affected by the **political cycle**? (Aaskoven 2016) To what extent it depend on **administrative capacity**?

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