



European Commission

Directorate General Economic and Financial Affairs

Consumer flash estimates

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EU WORKSHOP ON RECENT DEVELOPMENTS IN
BUSINESS AND CONSUMER SURVEYS

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Why a consumer flash estimate?

Conclusions from 2007 workshop:

- the flash PMI put pressure on the JHBCS Programme to advance the releases of surveys results and consider whether a flash ESI could be released...

Conclusions from 2008 workshop:

- flash ESI would imply significant advance deliveries from institutes and such an advancement would endanger the quality of the business surveys
- proposal of launching the *TF Consumer* to test the feasibility of publishing an advanced consumer confidence indicator for EU / EA



Why a consumer flash estimate?

DG ECFIN

Consumer surveys are distinct from other sectors

- They tend to come in earlier
- They have different modalities
- Their visibility is somewhat overshadowed
- They are not (yet!) in the PMI

Advancing their calendar may bring higher visibility without loosing in terms of quality



- An initial work program divided into 3 parts
- The methodology
- The results from January to September 2009



The work program

DG ECFIN

- Identifying the best methodology
- Testing the methodology retained
- **Focussing on the operational aspects faced by institutes**



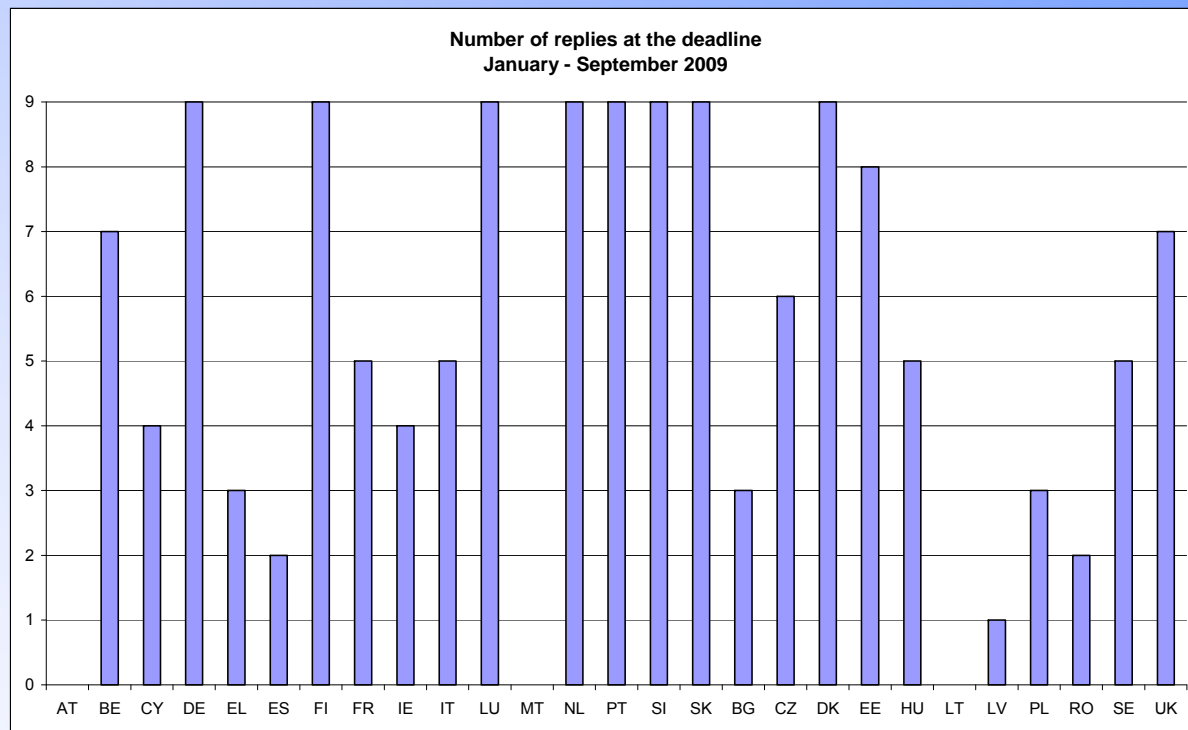
Identifying the best methodology

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Construct an indicator using the data available at the deadline (according to the calendar) is an issue of missing countries in the calculation

% Total weights of the respondents

	EU	EA
Jan-09	29.0%	39.1%
Feb-09	29.0%	39.1%
Mar-09	82.2%	74.8%
Apr-09	91.4%	93.5%
May-09	68.1%	65.3%
Jun-09	86.5%	82.8%
Jul-09	65.4%	61.1%
Aug-09	89.4%	85.9%
Sep-09	71.8%	66.7%





1 - Use a sort of “bridge model”

$$CI_{EU/EA} = \alpha + \beta CI_{EU/EA\text{-missing}}$$

where $CI_{EU/EA\text{-missing}}$ = CI net of missing, calculated each month with the available data

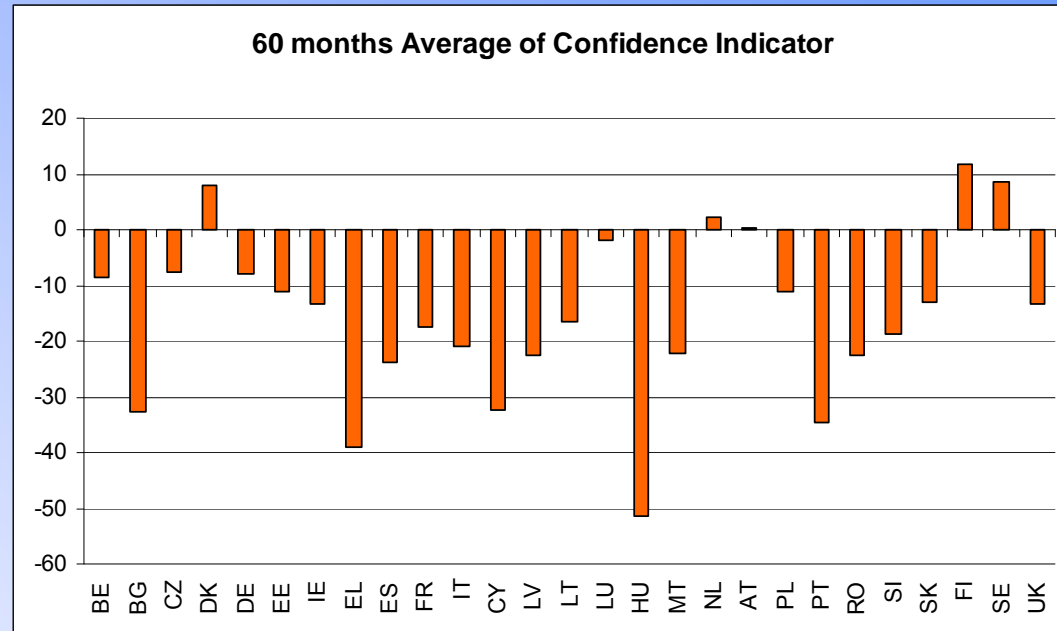
2 - Treat missing countries as missing values, estimate/forecast missing data and aggregate



Why we proposed this second methodology

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- By construction, take into account the levels of indicators
- Reference of the Headline Inflation Model (ESTAT)
- Simple and robust
- Achieve better results





- A set of 3 estimates are sequentially computed for some or all missing countries

Model	Methodology	Countries concerned
1. "conservative"	$X_t = X_{t-1}$	All missing countries
2. "AR"	$X_t = a + b \cdot X_{t-1} + u_t$	Some missing countries
3. "Linear model"	$X_t = a + b \cdot X_{t-1} + c \cdot Z_t + u_t$	Some missing countries

- Aggregation (as a country weighted average) to produce estimates for the CI_{EU} and CI_{EA} for models 1 to 3



The results (January – September 2009)

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- No model seems to achieve better accuracy

Model <i>EU</i>	AVE	MIN	MAX	MSE	MAE
1	0.07	0.09	1.65	0.49	0.53
2	0.13	0.02	1.57	0.43	0.44
3	0.27	0.10	0.88	0.22	0.42
<i>Flash</i>	<i>0.16</i>	<i>0.05</i>	<i>1.37</i>	<i>0.34</i>	<i>0.41</i>

- Aggregation of results to get the « Flash » as a simple average of the 3 estimates



The results (January – September 2009)

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	LEVEL: FLASH		OBSERVED		observed - forecasted	
	EU	EA	EU	EA	EU	EA
Jan-09	-29.7	-31.1	-30.6	-30.5	-0.9	0.6
Feb-09	-31.5	-31.2	-31.6	-32.5	-0.1	-1.2
Mar-09	-31.8	-33.8	-31.7	-33.7	0.1	0.1
Apr-09	-28.9	-31.5	-28.7	-31.3	0.2	0.2
May-09	-27.2	-29.5	-25.8	-28.1	1.4	1.4
Jun-09	-23.3	-25.7	-22.8	-25.1	0.5	0.7
Jul-09	-21.2	-23.4	-20.9	-23.0	0.3	0.4
Aug-09	-20.2	-22.2	-20.0	-22.0	0.2	0.2
Sep-09	-16.5	-18.9	-16.7	-19.0	-0.2	-0.1

	TREND: FLASH - observed(-1)		OBSERVED	
	EU	EA	EU	EA
Jan-09	-	-	-	-
Feb-09	-	-	-	-
Mar-09	=	-	=	-
Apr-09	+	+	+	+
May-09	+	+	+	+
Jun-09	+	+	+	+
Jul-09	+	+	+	+
Aug-09	+	+	+	+
Sep-09	+	+	+	+



Concluding remarks

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- Possible to release a “flash consumer” around the 23rd in each month (like flash PMI).
- The proposed methodology achieves good results
 - Almost no revisions (if rounded)
 - Signal always good direction
- The more countries are able to deliver the data earlier, the better are the results.



Calendar for 2009 and 2010

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TEST early consumer survey

2009	Deadline for early delivery of results
January	Thu 22-Jan-09
February	Thu 19-Feb-09
March	Mon 23-Mar-09
April	Wed 22-Apr-09
May	Thu 21-May-09
June	Mon 22-Jun-09
July	Thu 23-Jul-09
August	Mon 24-Aug-09
September	Tue 22-Sep-09
October	Thu 22-Oct-09
November	Fri 20-Nov-09
December	Mon 21-Dec-09

2010	Deadline for early delivery of results
January	Thu 21-Jan-10
February	Thu 18-Feb-10
March	Mon 22-Mar-10
April	Thu 22-Apr-10
May	Thu 20-May-10
June	Tue 22-Jun-10
July	Thu 22-Jul-10
August	Mon 23-Aug-10
September	Wed 22-Sep-10
October	Thu 21-Oct-10
November	Mon 22-Nov-10
December	Mon 20-Dec-10