



BANCA D'ITALIA
EUROSISTEMA



CENTRO STUDI LUCA D'AGLIANO

DO FIRMS EXPORTING TO CHINA AND INDIA LOOK DIFFERENT?

by

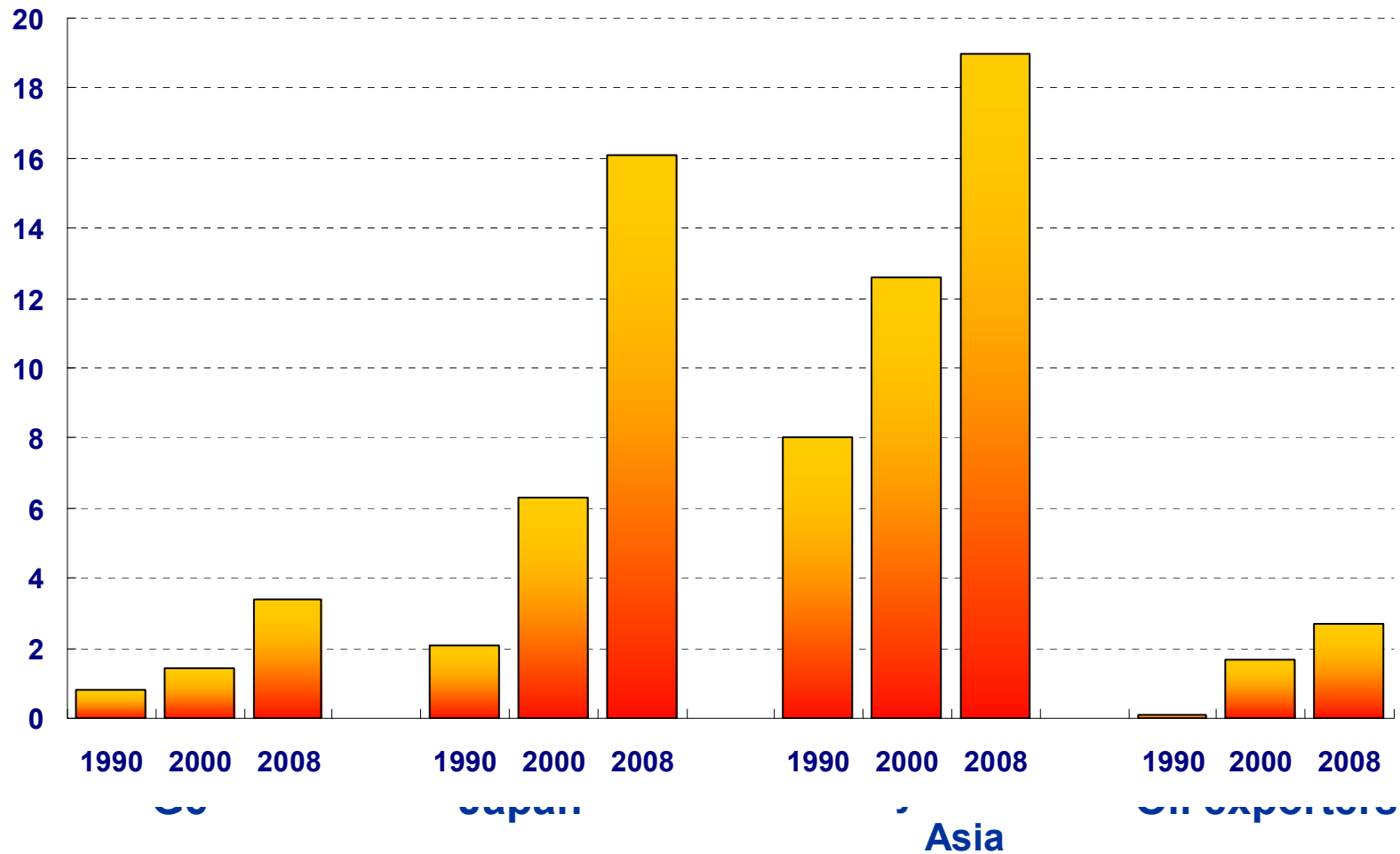
**Giorgio Barba Navaretti, Matteo Bugamelli,
Riccardo Cristadoro and Daniela Maggioni**

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MOTIVATING FACT 1

Export share of China growing everywhere

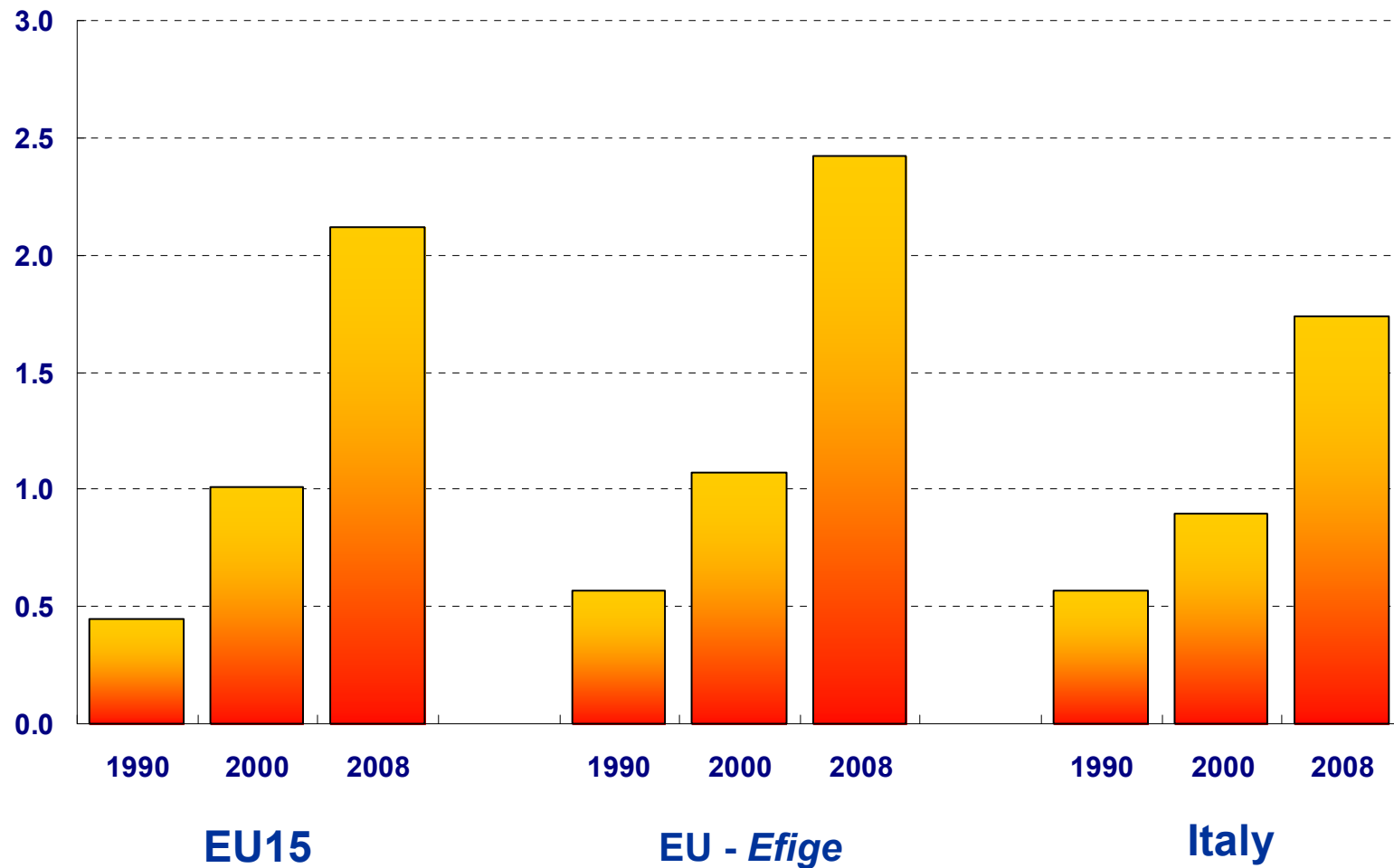
China's weight in total export of each country/group



MOTIVATING FACT 1

Export Share of China growing everywhere

China's weight in total export of each country/group



Motivating facts: *exporters by country...*

The geographical distribution of exporters

Country	Share of firms exporting	Share of Exporters to China and India	Share of Exporters to markets Outside Europe excl. China/India
AUT	73.2	17.8	19.5
FRA	58.5	22.2	39.7
GER	60.0	27.3	27.7
HUN	67.3	1.6	14.4
ITA	72.2	17.7	40.9
SPA	61.1	10.8	44.1
UK	64.0	25.8	42.7
Total	64.4	19.9	37.4

COUNTRY
OR
INDUSTRY?

Source: Authors' elaborations from EU-EFIGE/Bruegel-UniCredit dataset

Share of exporters over the whole population are defined both according to the *narrow* and the *wide* definition of exporter (see Table A2). Share of exporters according to the *narrow* definition and destination-specific shares of exporters are defined for the export activity in 2008. Share of exporters according to the *wide* definition capture the firm export activity in both 2008 and previous years.

Share of Exporters to Countries Outside Europe does not include firms exporting to China and India.

Structure of presentation

- ❑ **BASIC QUESTION:**
 - Are firms exporting to China and India like all other exporters?
 - ❑ Descriptive statistics
 - ❑ Core regressions
- ❑ **OWNERSHIP, MANAGEMENT and THE CASE of ITALY**
 - Over and above the main factors known to the literature is there a marginal role for ownership characteristic and managerial practices in export performance?
 - ❑ All sample results (family, group, manag.)
 - ❑ Exporter vs Exporter to C&I
 - Is Italy different?

LITERATURE 1 (*size & productivity*)

International trade and heterogeneous firms

Efficient firms **export**, less productive ones serve only the **domestic** market, least productive ones **exit**.

Theory: *New New Trade Literature*; Melitz 2003

Empirics: Bernard et al., 2007, Wagner, 2007.....

OUR DATASET

- *Nations* and *sectors* do not produce, do not trade, do not compete; it is *firms* that produce trade and compete.
- Firm level data reveal facts that are unobservable at the aggregate level
- **EFIGE SURVEY** («*European Firms In a Global Economy: Internal policies for external competitiveness*») collects harmonized firm level data for 7 EU countries (AUT, FRA, GER, HUN, ITA, SPA, UK) [*Efige data have been complemented by balance sheet data drawn from the database **Amadeus***]
- No separate info on X China + India

Country	Number of firms
AUT	482
FRA	2,973
GER	2,973
HUN	488
ITA	3,021
SPA	2,832
UK	2,142
Total	14,911

Basic descriptions:

Exporters' characteristics

Variable	Non Exporters	Exporters	diff	Exporters to all countries excluding China/India	Exporters to China/India	diff
labour productivity	116.88	152.32	a	152.27	163.41	ns
size	39	83	a	73	123	a
family	0.75	0.73	a	0.73	0.67	a
family_wide	0.89	0.84	a	0.84	0.78	a
fam_exec	54.17	45.92	a	47.98	36.88	a
centralised	0.79	0.71	a	0.72	0.65	a
reward	0.28	0.39	a	0.36	0.50	a
forexp_exec	0.10	0.25	a	0.23	0.35	a
group	0.12	0.21	a	0.20	0.33	a

Columns *diff* report the significance level of a t-test on the equality of means. *a,b,c* Significant at 1%,5% and 10%, *ns* not-significant.

What distinguishes exporters?

Export performance of European firms is largely explained by firm specific characteristics (more than by country features or the sectoral composition).

VARIABLES	(1)	(2)	(3)	(4)	(5)	
Dependent variable: dummy 0/1: 1 = exporter	log(employment)	0.335*** [0.015]	0.327*** [0.021]	0.330*** [0.021]	0.297*** [0.021]	0.281*** [0.022]
	log(productivity)		0.241*** [0.025]	0.252*** [0.025]	0.249*** [0.025]	0.248*** [0.027]
0 = non exporter	Skill ratio			-0.001 [0.001]	-0.001** [0.001]	-0.001* [0.001]
	innovation				0.482*** [0.036]	0.450*** [0.038]
	log(capital intensity)				0.041*** [0.015]	
	Constant	-1.337*** [0.070]	-2.358*** [0.152]	-2.366*** [0.163]	-2.525*** [0.164]	-2.462*** [0.172]
	Observations	14723	10246	9771	9771	9236
	Pseudo-R2	0.096	0.118	0.120	0.142	0.135

What distinguishes exporters to China and India?

Exporting to China&India requires the same “qualities” but to a significantly higher degree than exporting to closer countries.

Dependent variable: dummy 0/1:	VARIABLES	(1)	(2)	(3)	(4)	(5)
1 = exporter to China&India	log(employment)	0.196*** [0.017]	0.155*** [0.025]	0.178*** [0.025]	0.170*** [0.025]	0.151*** [0.027]
	log(productivity)		0.077* [0.041]	0.073* [0.042]	0.076* [0.042]	0.098** [0.040]
0 = <u>other exporters</u>	skill ratio			0.003*** [0.001]	0.003*** [0.001]	0.003** [0.001]
	innovation				0.248*** [0.058]	0.245*** [0.060]
	log(capital intensity)					0.014 [0.024]
	Observations	7821	5555	5304	5304	5084
	Pseudo-R2	0.095	0.102	0.104	0.109	0.109

LITERATURE 2 (*ownership & management*)

Expected effect of ownership and management variables:

➤ Family ownership:

➤ May negatively affect *performance and long term investments* because of dynastic management, risk aversion, dilution of capital, centralised decision making (Caselli and Gennaioli, 2003, Burkart, Panunzi and Shleifer, 2003, Perez-Gonzalez, 2006, Sraer and Thesmar, 2006, Favero et al 2007, Bertrand and Schoar, 2006 Bianco Golinelli Parigi 2009)

➤ May negatively affect exports, particularly to faraway, risky mkts (Barba Navaretti, Faini and Tucci, 2008)

➤➔ measure: two definition "narrow" and "wide" (see **table 1**) we also consider *foreign experience* of managers and whether firms belong to a *group*.

➤ Management practices

➤ Independent managers

➤ Decentralisation of decision making


➤ Reward system

➤ International experience

Do ownership and management practices affect firms' export propensities?

Dependent variable dummy 0/1: $1 = \text{exporter}$; $0 = \text{non exporter}$

Even when we control for size & productivity export propensity is affected by:

- family ownership: - ~
 - family executive: -
 - foreign experience of executives: +
 - centralized decision process: -
- Interaction
- 

Do ownership and management practices affect firms' export propensities to faraway markets?

Dependent variable dummy 0/1: 1 = exporter to **China and India**; 0 = exporter to other countries

Firms exporting to China & India differ significantly in productivity, innovation propensities and workforce skills even when we compare them to other exporters

Considering ownership and management practices:

- family ownership *per se* is not significant, while a “family management affects *negatively* the probability to be present in faraway markets
- belonging to a GROUP: +
- foreign experience of executives: +

Table 3. exp to C&Ivs exp

FOCUS on ITALY

Dependent variable dummy 0/1: $1 = \text{exporter}$; $0 = \text{non exporter}$ **or** $1 = \text{exporter to C\&I}$; $0 = \text{other exporters}$

Puzzle!!

In Italy, "**FAMILY firms**" **perform better** in terms of exports compared to the other firms

With two qualifications:

- *here too firms' propensity to export decreases with the involvement of family members in the management of the firm.*
- *positive family effect vanishes in the case of faraway markets like China and India.*

Results hold qualitatively also for intensive margin

Table 4. exp vs non exp:

Table 5. exp in C&I vs other exp:

Conclusions

- Firm characteristics remain central in explaining complex patterns of internationalisation like exporting to China
- Basic presumptions on family firms hold, but need to tackle endogeneity
- Result on Italy interesting but difficult to explain
- Further research necessary:
 - good instruments for family
 - Link to institutional factors
 - Introduce other dimensions of internationalisation

Tabella 1

Family firms by country: "narrow" and "wide" definition ¹			
country	Narrow	Wide	Wide - Narrow
AUT	82.39	87.69	5.30
FRA	57.58	81.03	23.44
GER	83.87	90.88	7.01
HUN	55.67	81.79	26.12
ITA	75.60	86.81	11.21
SPA	76.45	83.54	7.09
UK	64.52	82.55	18.03
Total	73.73	85.98	12.25

(1) "narrow": family firms *i.e.* firms that declared to have a family ownership; "wide": includes family firms *and* firms having an individual as the main shareholder (capital share \geq 30%)

BACK

Family and export status

VARIABLES	(1)	(2)	(3)	(4)
log(productivity)	0.244*** [0.025]	0.239*** [0.025]	0.232*** [0.026]	0.227*** [0.027]
log(employment)	0.289*** [0.021]	0.277*** [0.022]	0.260*** [0.023]	0.237*** [0.023]
skill ratio	-0.001** [0.001]	-0.001** [0.001]	-0.002** [0.001]	-0.002** [0.001]
innovation	0.487*** [0.036]	0.487*** [0.036]	0.498*** [0.038]	0.458*** [0.039]
family_wide	-0.093* [0.055]	-0.054 [0.055]	0.020 [0.065]	0.043 [0.066]
fam_exec			-0.002*** [0.001]	-0.002*** [0.001]
group		0.118** [0.057]	0.119** [0.059]	0.053 [0.060]
centralised				-0.078 [0.048]
forexp_exec				0.375*** [0.053]
Observations	9761	9761	9201	8828
Pseudo-R2	0.143	0.143	0.145	0.150

BACK

Family and exporting to China & India

VARIABLES	(1)	(2)	(3)	(4)
log(productivity)	0.073* [0.042]	0.061 [0.042]	0.065 [0.043]	0.060 [0.044]
log(employment)	0.164*** [0.026]	0.141*** [0.027]	0.130*** [0.028]	0.111*** [0.031]
skill ratio	0.003*** [0.001]	0.003*** [0.001]	0.003*** [0.001]	0.003*** [0.001]
innovation	0.253*** [0.059]	0.254*** [0.059]	0.249*** [0.061]	0.215*** [0.062]
family_wide	-0.075 [0.071]	-0.002 [0.077]	0.053 [0.089]	0.025 [0.091]
fam_exec			-0.002** [0.001]	-0.001* [0.001]
group		0.201*** [0.078]	0.175** [0.082]	0.194** [0.084]
centralised				-0.036 [0.066]
forexp_exec				0.150** [0.069]
Observations	5297	5297	4965	4745
Pseudo-R2	0.109	0.111	0.115	0.111

BACK

Family export status - ITALY

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
log(productivity)	0.242*** [0.025]	0.238*** [0.025]	0.238*** [0.025]	0.229*** [0.026]	0.230*** [0.026]	0.225*** [0.027]	0.226*** [0.027]
log(employment)	0.288*** [0.021]	0.276*** [0.022]	0.274*** [0.022]	0.255*** [0.023]	0.254*** [0.023]	0.233*** [0.023]	0.233*** [0.023]
skill ratio	-0.001** [0.001]	-0.001** [0.001]	-0.001** [0.001]	-0.002** [0.001]	-0.002** [0.001]	-0.002** [0.001]	-0.002** [0.001]
innovation	0.485*** [0.036]	0.485*** [0.036]	0.484*** [0.036]	0.495*** [0.038]	0.495*** [0.038]	0.455*** [0.039]	0.455*** [0.039]
family_wide	-0.182*** [0.068]	-0.142** [0.068]	-0.118* [0.068]	-0.048 [0.077]	-0.028 [0.078]	-0.020 [0.078]	-0.010 [0.079]
familywideITA	0.306*** [0.107]	0.299*** [0.107]	0.217* [0.113]	0.276** [0.131]	0.210 [0.135]	0.245* [0.133]	0.211 [0.138]
fam_exec				-0.002*** [0.001]	-0.002*** [0.001]	-0.002*** [0.001]	-0.002*** [0.001]
famexecITA				0.001 [0.001]	0.001 [0.001]	0.001 [0.001]	0.001 [0.001]
group		0.114** [0.056]	0.174*** [0.067]	0.114* [0.059]	0.166** [0.070]	0.049 [0.060]	0.084 [0.071]
groupITA			-0.229** [0.110]		-0.209* [0.119]		-0.139 [0.122]
centralised						-0.073 [0.048]	-0.055 [0.055]
centralITA							-0.088 [0.109]
forexp_exec						0.373*** [0.053]	0.380*** [0.059]
forexpITA							-0.042 [0.126]
Observations	9761	9761	9761	9201	9201	8828	8828
Pseudo-R2	0.144	0.144	0.145	0.146	0.146	0.151	0.151

BACK

Family and exporting to China & India - ITALY

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)
log(productivity)	0.071*	0.060	0.060	0.063	0.063	0.057	0.057
	[0.042]	[0.042]	[0.042]	[0.044]	[0.044]	[0.044]	[0.045]
log(employment)	0.164***	0.141***	0.141***	0.125***	0.125***	0.107***	0.107***
	[0.026]	[0.027]	[0.027]	[0.028]	[0.028]	[0.031]	[0.031]
skill ratio	0.003***	0.003***	0.003***	0.003***	0.003***	0.003***	0.003***
	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]	[0.001]
innovation	0.250***	0.251***	0.251***	0.244***	0.245***	0.210***	0.211***
	[0.059]	[0.059]	[0.059]	[0.061]	[0.061]	[0.062]	[0.062]
family_wide	-0.134	-0.062	-0.074	0.017	-0.001	-0.030	-0.039
	[0.089]	[0.094]	[0.097]	[0.105]	[0.107]	[0.109]	[0.112]
familywideITA	0.208	0.212	0.255*	0.214	0.285	0.277	0.316*
	[0.136]	[0.136]	[0.151]	[0.167]	[0.178]	[0.169]	[0.182]
fam_exec				-0.003***	-0.003***	-0.003**	-0.003**
				[0.001]	[0.001]	[0.001]	[0.001]
famexecITA				0.003*	0.003**	0.002	0.002
				[0.001]	[0.001]	[0.001]	[0.002]
group		0.203***	0.175*	0.175**	0.129	0.194**	0.163
		[0.078]	[0.098]	[0.083]	[0.102]	[0.084]	[0.105]
groupITA			0.095		0.172		0.104
			[0.137]		[0.147]		[0.152]
centralised						-0.030	-0.052
						[0.066]	[0.081]
centralITA							0.084
							[0.132]
forexp_exec						0.150**	0.131
						[0.069]	[0.083]
forexpITA							0.074
							[0.135]
Observations	5297	5297	5297	4965	4965	4745	4745
Pseudo-R2	0.110	0.112	0.112	0.116	0.117	0.113	0.113

BACK