
On the Relevance of Reporting Comprehensive Income under IAS / IFRS: Insight from Major European Capital Markets

Jean-François Casta & Olivier Ramond
(Paris-Dauphine University)

*Co-authors: Steve Lin (Florida International University)
Laurent Batsch (Paris-Dauphine University)*

Presentation Overview (1/1)

Introduction : Scope of the IASB / FASB
Performance Reporting Project

Part I. Purposes of the study and research framework

Part II. Empirical results : Some preliminary comments

Conclusions : Main results and future research avenues

Introduction (1/1)

- ↪ In October 2003, the International Accounting Standards Board (IASB) and the US Financial Accounting Standards Board (FASB) formed a Joint International Group (JIG)
 - ❑ **Objective:** *“to establish standards for the presentation of information in order to enhance the usefulness of that information in assessing the financial performance and financial position of an entity”* (IASB, 25th of October 2004).
 - ❑ Initially entitled **“Performance Reporting: Reporting Comprehensive Income”**
 - ❑ Is mainly concerned with the **presentation and disclosure of financial performance information in financial statements** under IAS / IFRS and US GAAPs

- ↪ **Why such a project?**
 - ❑ The **proliferation of alternative and inconsistent financial performance measures** are prejudicial to high-quality financial reporting,
 - ❑ **Homogeneous information** is not only **essential** to any well-informed investment decisions but is also propitious **to efficient capital markets.**

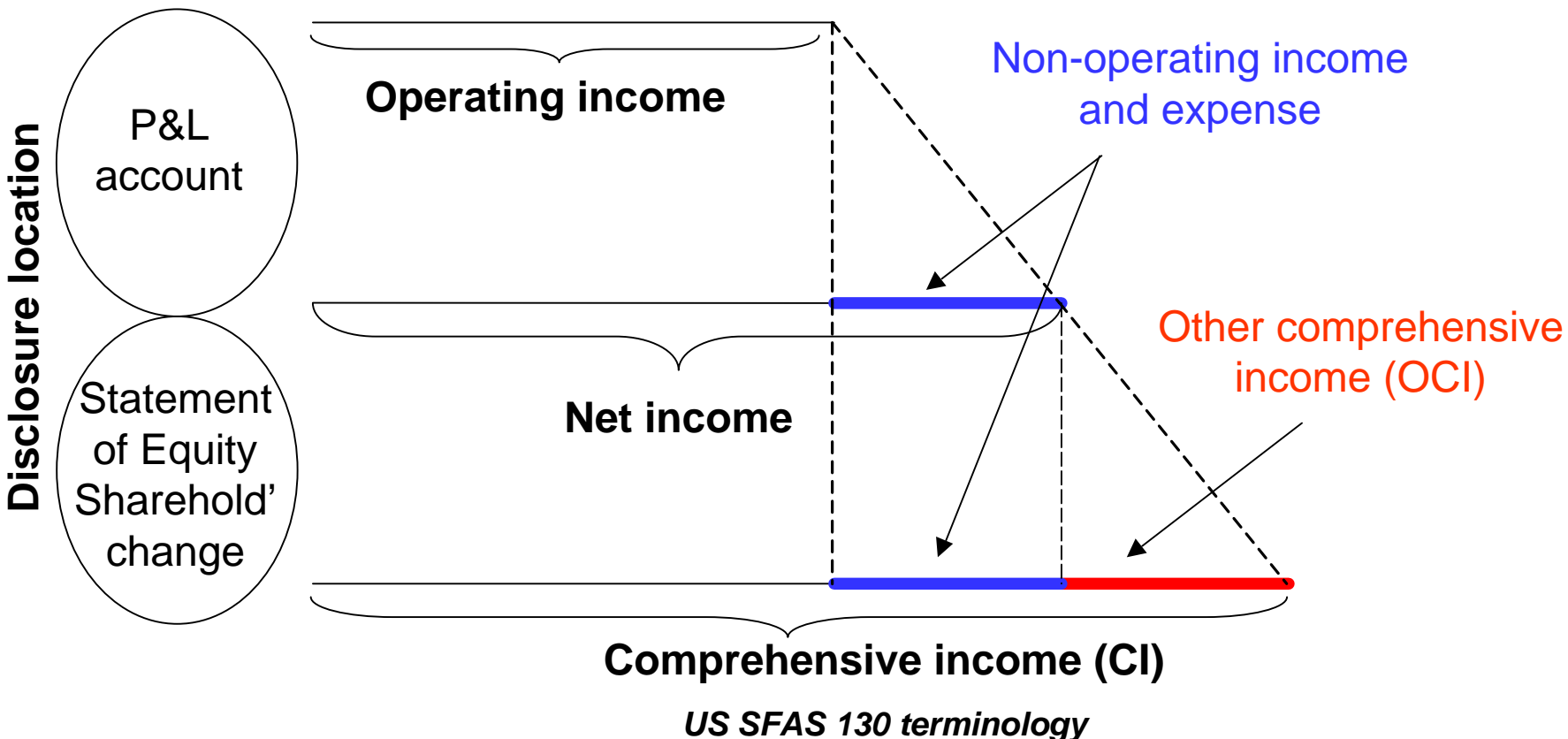
IASB and FASB Joint Project – Reporting Financial Performance (1/4)

↳ Highlights

- Adopt a broader concept of financial performance (i.e. comprehensive income) instead of a single performance measure (i.e. bottom-line earnings)
 - ✓ Political lobbying pressure made by various US-based professional bodies
 - ✓ “[...] *the increasing number of wealth changes that elude disclosure on the income statement. [...] calls for the display of comprehensive income that allows components of different character to be seen and evaluated separately.*” (AIMR, 1993: 63).
 - ✓ “[...] *The financial statements must recognize, as they occur, all events or transactions that affect the value of the company’s net assets and, hence, common shareowner’s wealth.*”
(CFA Institute, 2005: 10).

Summary Accounting Income Measures: Prior consideration (2/4)

The « Income Russian Dolls Pyramid »



Prior consideration: What are OCI / CI items?

(3/4)

↪ What is Comprehensive Income (CI)?

- It is the change in equity [net assets] during a period except those resulting from investments by owners and distributions to owners (i.e. dividends and capital change)
- CI differs from the traditional net income measure as it encompasses 'other comprehensive income' (OCI)

↪ What are OCI?

- These are accounting items that are directly taken to shareholders' equity and bypass the income statement
- E.g. Under IAS / IFRS & US GAAPs,
 - foreign currency translation gains and losses,
 - Cash flow hedge
 - actuarial gains and losses
 - asset revaluations

IASB and FASB Joint Project – Reporting Financial Performance (4/4)

↪ *Threefold question :*

- **Decision-making usefulness:** Are comprehensive income and its components used by investors for investment decision making? Are they consistently used by investors in different countries?
- **Value Relevance:** Whether ‘comprehensive income’ provides incremental price relevant information beyond net income across countries and whether it should be legitimately introduced into the international accounting standards?
- **Disclosure materiality:** Should firms across countries be required to disclose these summary measures consistently on the face of ‘Statement of Comprehensive Income’?

Summary Accounting Income Measures: Prior empirical results (1/2)

↪ Empirical evidence have been mainly provided by US-based studies

↪ Is CI superior to NI in terms of value-relevance ? (Pre-SFAS 130)

No evidence

➤ e.g. Cheng (1998), Dhaliwal et al (1999), Chambers et al (2006)

Evidence

➤ e.g. Biddle and Choi (2006)

↪ Are OCI and its components valued by the market ?

Chambers et al (2006): Not in the pre-SFAS 130 period but OCI such as marketable security adjustments and foreign currency translation adjustments for all firms are valued in the post-SFAS 130 period

Dhaliwal et al (1999): marketable security adjustments for financial firms

Biddle and Choi (2006): OCI and all its components for all firms

Summary Accounting Income Measures: Prior empirical results (2/2)

↳ UK evidence from Lin (2006)

- ❑ FRS No.3 requires 'Statement of Total Recognized gains and losses', including net income and components of OCI
- ❑ OPI and its components are value relevant and provide incremental price information beyond net income
- ❑ Some OCI components are value relevant and provide incremental price information beyond net income

↳ As a conclusion, empirical evidence in the US and the UK are mixed

Purposes of this study (1/2)

- ↳ Evaluate the IASB and FASB joint project on reporting financial performance

- ↳ At a European level

- ↳ by providing preliminary empirical evidence on
 - the usefulness,
 - the value relevance, and
 - the disclosure economic consequences of comprehensive income and its components (i.e. operating income, net income and other comprehensive income)

Purposes of the study: Research Questions

(2/2)

- ↪ To what extent 'comprehensive income' and its components are value relevant to investors in countries with very different legal, social, and economic environment?
- ↪ Does comprehensive income, at an aggregate level, provide incremental value-relevance beyond net income or operating income in the European financial markets?
- ↪ Do 'dirty surplus flows' or OCI's provide incremental value-relevant information beyond traditional net income?
- ↪ Can we observe differences in value-relevance between 'reported comprehensive income' and 'non-reported comprehensive income'? In other words, is 'comprehensive income' more value-relevant when it is clearly disclosed on the face of the financial statements than when it is not?

Sample and Data (1/1)

- ↪ Sample made of **listed firms in five major EU stock markets**, i.e. UK, Germany, France, Italy and Spain
- ↪ **Accounting and financial data** collected from Datastream and Worldscope
- ↪ **Period of analysis : 1993 – 2004** (pre-*IAS* compliance period)
 - ❑ 2005 data are left for robustness checks purpose
- ↪ **Financial firms were excluded**
- ↪ **The final sample (after outliers treatment) contains around:**
 - ✓ UK: 7,000 obs
 - ✓ Germany: 4,500 obs
 - ✓ France: 4,000 obs
 - ✓ Italy: 1,200 obs
 - ✓ Spain: 700 obs

Research design (1/2)

↳ Based on the Ohlson's (1991) model framework

□ Comprehensive income is measured as:

$$CI_t \equiv \Delta BV_t - N_t + d_t \quad \text{and} \quad OCI_t = CI_t - NI_t$$

□ Usefulness and value-relevance of the three Accounting Income (AI) measures (i.e. Net, Operating and Comprehensive income) are respectively assessed by the following Return-Earnings OLS slope coefficients significance and R^2 :

$$RET_t = \mathbf{b}_0 + \mathbf{b}_1 \frac{AI_t}{P_{t-1}} + \mathbf{b}_2 \frac{\Delta AI_t}{P_{t-1}} + u_t$$

□ Conventional and ranking OLS methodology are used

Research design (2/2)

↪ How to compare value-relevance between AI measures ?

- Non-nested tests: the Vuong (1989) test is performed to compare value-relevance of AI amongst earnings-return models
- Nested tests: Additional information provided by OCI beyond NI is measured by R^2 increases observed between the following two nested-models

$$RET_t = \mathbf{g}_0 + \mathbf{g}_1 \frac{NI_t}{P_{t-1}} + \mathbf{g}_2 \frac{\Delta NI_t}{P_{t-1}} + u'_t$$

$$RET_t = \mathbf{g}_0 + \mathbf{g}_1 \frac{NI_t}{P_{t-1}} + \mathbf{g}_2 \frac{\Delta NI_t}{P_{t-1}} + \mathbf{g}_3 \frac{OCI_t}{P_{t-1}} + \mathbf{g}_4 \frac{\Delta OCI_t}{P_{t-1}} + u'_t$$

Empirical Results (1/4)

⇒ Empirical evidence indicate that :

- ⇒ OPI, NI and CI are all associated with share returns in all five EU countries
 - OPI is more value-relevant than NI and CI in the UK setting
 - This could be due to the OPI disclosure requirement made by FRS 3
 - NI clearly dominates CI and OPI in all continental EU countries
- ⇒ In all cases, CI provides much less value-relevance than NI and OPI
 - Consistent with US evidence
- ⇒ OCI is value-relevant and provides incremental value-relevance beyond net income
 - Very different from US findings
- ⇒ These results may be driven by IAS / US GAAPs early-adopters

Empirical Results: Early adopters table (2/4)

	Germany		France		Italy		Spain	
<i>Year</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>
2004	381	60.9	52	8.2	23	8.7	8	7.8
2003	372	57.2	45	7.1	22	8.3	8	7.8
2002	361	54.1	41	6.5	21	7.9	8	7.8
2001	286	45.2	36	5.7	20	7.5	8	7.8
2000	257	40.9	31	4.9	20	7.5	8	7.8
1999	131	24.7	31	4.9	19	7.2	6	5.8
1998	81	15.9	30	4.7	16	6.0	5	4.9
1997	45	9.0	29	4.6	13	4.9	4	3.9
1996	20	4.2	22	3.5	11	4.2	4	3.9
1995	13	2.7	19	3.0	10	3.8	3	2.9
1994	9	1.9	17	2.7	6	2.3	3	2.9
1993	8	1.7	12	1.9	6	2.3	3	2.9
1992	7	1.5	11	1.7	5	1.9	3	2.9
Total Firm-Y obs.	1,971	27.6%	376	4.58%	192	5.57%	71	5.30%
	out of 7,130		out of 8,216		out of 3,445		out of 1,339	

Empirical Results : Robustness checks (3/4)

⇒ Sensitivity tests on German early-adopters:

⇒ Early (IAS and US) adopters in Germany increase the explanatory power of OCI for share return

⇒ Further tests indicate that US early adopters exhibit high OCI value-relevance compared with IAS or local standards followers

□ This result provides evidence supporting Beaver's (1981) and Hirst & Hopkins' (1998) psychology-based financial reporting theory

- Information is valued by investors only when it is directly readable (from a firm's financial statements for instance)

⇒ Other sensitivity tests:

⇒ Robustness checks conducted on the return variable, the period of analysis, SIC industry did not point out any major outcomes' differences

Empirical Results: Summary (4/4)

⇒ This study provides 4 main findings :

- ↪ Operating income, net income, and comprehensive income are all value relevant, although their usefulness varies across major European markets
- ↪ Net income dominates comprehensive income and operating income except in the UK
- ↪ Other comprehensive income is generally value relevant
- ↪ Early adoption of IFRS or US GAAP increases the return-CI relationship

Conclusions (1/1)

- ↪ Summary accounting income measures are generally value relevant across major European markets
- ↪ Information contained in summary accounting income measures varies due to the differences in socio-economic environment across borders
- ↪ Adoption of Anglo-American accounting system increases the relationship between return and comprehensive income perhaps due to the following two reasons:
 - ❑ Clear disclosure of comprehensive income, other comprehensive income and its components in financial statements
 - ❑ Mark-to-market accounting practices (fair value accounting)
- ↪ Results generally support the rationale underlying the IASB project
- ↪ Future research should investigate the IFRS introduction impact on the value relevance and usefulness of individual OCI items

Thank you for your attention