FROM FINANCIAL TO “SUSTAINABLE” CAPITAL MAINTENANCE*

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ABSTRACT

How should corporate sustainability be addressed in financial reporting? This research investigates the potential use of capital maintenance as a framework to develop sustainability reporting. Its claim is that the disclosure of capital should be reconsidered to strengthen corporate accountability.

After conducting a historical review of capital maintenance theories, three purpose-oriented treatments are identified: the net assets, dynamic and sustainable views. From the viewpoint of stakeholders’ information and corporate social responsibility, disclosure based on the sustainable capital maintenance view would enhance transparency. Furthermore, it would provide a measurement basis that currently lacks for subsequent regulation of corporate behavior.

Consistently, relevant accounting methods should be developed to complement the loopholes of modern reporting standards. The claim of this research is that sustainable capital maintenance could be implemented by defining and disclosing three key elements of equity: capital contributed by shareholders, retained earnings, and a sustainability reserve, which would reflect the financial assessment of future environmental and social risks. Since this reserve would only affect the allocation of retained earnings and not the measurement of performance, it would be compatible with international financial reporting standards.

KEYWORDS: Capital Maintenance, Capital, Net Assets, Corporate Sustainability, Corporate Social Responsibility, Company Law, International Financial Reporting Standards, Accounting, Financial Reporting

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1. INTRODUCTION

Sustainability reports have been the mainstream way to account for corporate social responsibility (CSR) in the last 30 years. In this type of disclosure, the “triple bottom line” reports economic, environmental, and social performances as three different areas, and it relies on both qualitative and quantitative assessments. Consequently, environmental and social indicators do not affect the measure of economic performance (corporate profits).

Why should financial reporting account for corporate sustainability? The answer varies depending on the economic context. This research is based on the assumption that climate issues and social instability have gained such momentum today that risks may no longer be ignored in financial accounting. This viewpoint is shared by a minority of authors who described some accounting methods for reporting environmental “goods” and “bads”. These authors proposed stretching the scope of quantitative reporting from purely financial accounting to include some externalities related to the environment and society.

By contrast, this article adopts a moderate approach based on the existing framework of accounting. In Europe, the International Financial Reporting Standards (IFRS) are used by listed companies, while some local accounting standards are generally used by other entities subject to disclosure obligations in the frame of Company Law. In IFRS, it is already possible to account for environmental and social risks. However, this possibility is clearly underestimated.

The issue of environmental risks is just the tip of the iceberg when it comes to considering sustainability in financial reporting. A more fundamental loophole in financial reporting is the limitation of the modern concept of capital, which is not comprehensive enough to ensure the financial sustainability

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1 A notable example is the Global Reporting Initiative (GRI) Standards, available at http://www.globalreporting.org/
2 See for example the development of capital maintenance in section two of this article.
3 The situation has become even more dramatic with the Covid-19 crisis and commercial frictions in 2020. Even the most optimistic financial analyst would take into account environmental and political risks when forecasting future business performance.
4 Ijiri, Y.; Lin, H.: Symmetric accounting to integrate ‘goods’ and ‘bads’ in the double-entry framework: Logically stretching the domain of conventional accounting to the other half space, Journal of Engineering and Technology management, 23, 2006, p. 64-78; Rambaud, A.; Richard, J.: The “Triple Depreciation Line” instead of the “Triple Bottom Line”: Towards a genuine integrated reporting, Critical Perspectives on Accounting, 33, 2015, p. 92–116.
5 Garcia, C.: Accounting and Law for Equity Capital and Corporate Sustainability, European Company Law, 17(5) 2020, p. 181-182.
of businesses. Additionally, the International Financial Reporting Standards (IFRS) do not provide guidance on international harmonization regarding the presentation of equity. Therefore, there is an urgent need to reshape the disclosure of shareholder equity to provide relevant information to decision makers.6

The main objective of this research is to reinvestigate the principle of capital maintenance in financial accounting. Unlike prior literature that focused mainly on accounting for inflation, this research attempts to investigate its potential benefits regarding corporate sustainability.

The purpose of capital maintenance in the 19th century was originally to prevent abuses regarding fictitious dividends and stock manipulations. Today, we can reinterpret capital maintenance from the viewpoint of modern corporate finance abuses, and we can possibly broaden the concept to include environmental and social risks.

This research builds upon the classical accounting theories of the 20th century as well as more recent developments in accounting literature to identify relevant solutions. It aims to improve the information regarding shareholder equity using two main constraints: the rules should be compatible with current accounting standards (IFRS) and the production of information should be cost-efficient, that is, it should not require large amounts of resources.

The rest of this paper is organized as follows. Section 2 introduces the historical development of capital maintenance and its relationship with the objectives of financial reporting. Section 3 defines some purpose-oriented views of capital maintenance, including a new concept of “sustainable” capital maintenance. Section 4 addresses the definition, assessment, and reporting of capital for the purpose of corporate sustainability. Section 5 concludes with a few suggestions regarding financial reporting.

2. BACKGROUND THEORY

Capital maintenance can be understood in several ways. In a modern setting, capital maintenance refers to the need to prevent corporate capital reduction by excess dividend distribution or other aggressive equity transactions. In the pre-IFRS world, the main focus of capital maintenance was to distinguish between capital, the original investment of shareholders, and income, i.e. the profits earned from business operations.

6 For more details, see Garcia, C.: Accounting and Law for Equity Capital and Corporate Sustainability, European Company Law, 17(5) 2020, p. 176-182.
This section provides a historical overview of the development of capital maintenance in accounting. Even before the influence of Company Law, theories varied greatly through time and space. The brief overview regarding capital maintenance in this section reflects the development of accounting in Germany, France, Great Britain, the United States, and Japan since the 19th century.

**Graph 1: History of Capital Maintenance**

- **Legal capital view** (Stock-based approach with conservative assessment)
- **Inflation view** ("nominal" vs "physical" capital maintenance etc)
- **Sustainable view** (Flows-based approach with nonmonetary elements)
- **Dynamic view** (Flows-based approach with cost allocation)
- **Net assets view** (Stock-based approach with fair value)

**Legal Capital View (19th century).** If several theories of capital existed before modern Company Law, the idea of capital maintenance was originally borrowed from the legal concept of shareholders’ equity. The purpose was to “prevent shareholders’ contributions (from) being distributed as pretend profit”. At that time, accounting principles regarding the recognition and measurement of profits were not yet developed. Profit was defined as an increase in net assets (stock-based approach), and measurement was based on current or liquidation values.

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7 Nobes, C.: *Accounting for Capital: the Evolution of an Idea*, Accounting and Business Research, 45(4), 2015, p. 413-441; Whittington, G.: *Measurement in Financial Reporting: Half a Century of Research and Practice*. Abacus, 51(4), 2015, p. 549-571; Rambaud, A.; Richard, J.: *Le Capital : analyse croisée comptable, économique et historique*, Rapport du projet de recherche ANC, Paris, 2019.

8 Rambaud, A.; Richard, J.: *Le Capital : analyse croisée comptable, économique et historique*, Rapport du projet de recherche ANC, Paris, 2019.

9 Lutter, M. (ed): *Legal Capital in Europe*, European Company and Financial Law review, Special Volume 1, 2006, p.8.

10 Richard, J.: *The dangerous dynamics of capitalism: from static towards futuristic IFRS accounting*, Critical Perspectives on Accounting, 30, 2015, p. 9-34.
Dynamic View (the 1930s). After the Great Depression, the “dynamic” theory elaborated by E. Schmalenbach\(^{11}\) spread in accounting systems. In this approach, profits are measured from flows of revenues and expenses, and they are accumulated in retained earnings. Dividends can be distributed from retained earnings, while distributions of share capital and capital surplus are prohibited. The main advantage of this view is the clear separation of capital and net income. In the postwar period, the concept of capital grew away from its Company Law origin, with the growing influence of economics in accounting.\(^{12}\) The cornerstone of the dynamic view of capital maintenance is the principle of realization, which prevents unrealized capital gains from being included in the scope of net income.

Inflation View (the 1970s). The dynamic view of capital maintenance, based on historical cost accounting, was not adapted for the inflationary economies of the 1970s and 1980s. Therefore, alternative methods including price-level adjustments were developed at that time. In the IASB Conceptual Framework, “physical capital maintenance” reflects the need to compensate for the negative effect of monetary instability when measuring the value of physical investments and other assets.\(^{13}\)

Net Assets View (the 1990s). In the 1980s, the financialization in advanced economies was accompanied by a change in the concept of profit, at least for listed companies. The Financial Accounting Standards Board (FASB) started the move in 1984 with a concept of “comprehensive income” defined as the increase of net assets, regardless of the realization principle.\(^{14}\) The IASB followed in the 2001 Conceptual Framework, along with other accounting standards providing for fair value measurement. In the 2000s, flows-based measurement of income gradually faded to the benefit of less conservative accounting methods based on market value or net present value. For example, accounting for stock options, assets held for sale, investment property, finan-

\(^{11}\) Schmalenbach, E.: *Dynamic Accounting*, London, 1959, first published in German as *Grundlagen dynamischer Bilanzlehre* in 1919.

\(^{12}\) For example, Hicks is often considered as the father of the modern concept of profit. Hicks, J.R.: *Value and Capital*, Oxford, 1946. In fact, the work of E. Schmalenbach mentioned supra is much more precise than Hicks about the relationship between profits and balance sheet elements.

\(^{13}\) For more details, see Whittington, G.: *Measurement in Financial Reporting: Half a Century of Research and Practice*. Abacus, 51(4), 2015, p. 549-571; and Gutierrez, J.M.; Whittington, G.: *Some formal properties of capital maintenance and revaluation systems in financial accounting*, European Accounting Review, 6(3) 1997, p. 439-464.

\(^{14}\) Financial Accounting Standards Board: *Recognition and Measurement in Financial Statements of Business Enterprises*, *Statement of Financial Accounting Concepts No. 5*, Norwalk, 1984.
cial instruments, and pension liabilities result in some unrealized capital gains and losses being reported within the scope of profit.\(^\text{15}\)

**Sustainable view (the 2010s).** After the Lehman shock in 2008, the criticism against financialization, its negative effects on society, and the questionable role of financial markets in the collapse of the world economy resulted in the search for alternative regulation in accounting. There were indeed integrated reports, but there were also several attempts to quantify environmental and social capital in the frame of financial reporting.\(^\text{16}\) The objective of these approaches is to account for the nonmonetary externalities generated by the business activity within the scope of profit. They are mainly based on flows, and the scope of reporting slightly differs among authors so that there is no clear concept of “sustainable” capital maintenance yet. The next section is an attempt to define this new approach.

### 3. CAPITAL MAINTENANCE AS A PURPOSE-ORIENTED CONCEPT

The analytical framework in this paper builds on the conditional-normative methodology outlined by Mattessich\(^\text{17}\). A first element is a classification of accounting theories on the nature of capital and income into three perspectives: *decision usefulness* based on the asset-liability view of the balance sheet, *stewardship* focused on the correct time allocation of income, and *corporate social responsibility* based on sustainable capital and income. The second element is an adaptation of the theories of capital and the recognition of environmental and social risks.\(^\text{18}\)

Mattessich advocates a conditional-normative methodology in an attempt to bridge the normative and positive accounting research paradigms. Regarding

\(^\text{15}\) For some analysis of this conceptual change, see Biondi, Y.: *The Pure Logic of Accounting: A Critique of the Fair Value Revolution*, Accounting, Economics and Law 1(1) 2011, Art. 7.

\(^\text{16}\) After the pioneering work by Ijiri, for example: Ijiri, Y.; Lin, H.: *Symetric accounting to integrate ‘goods’ and ‘bads’ in the double-entry framework: Logically stretching the domain of conventional accounting to the other half space*, Journal of Engineering and Technology management, 23, 2006, p. 64-78., others followed: Rambaud, A.; Richard, J.: *The “Triple Depreciation Line” instead of the “Triple Bottom Line”: Towards a genuine integrated reporting*, Critical Perspectives on Accounting, 33, 2015, p. 92–116; Hatherly, D. et al.: *Reimagining Profits and Stakeholder Capital to Address Tensions among Stakeholders*, Business & Society, 59(2), 2020, p. 322–350.

\(^\text{17}\) Mattessich, R.: *Critique of accounting*, Westport, 1995.

\(^\text{18}\) Garcia, C.: *Accounting and Law for Equity Capital and Corporate Sustainability*, European Company Law, 17(5) 2020, p. 176-182.
accounting as applied science, Mattessich\(^9\) proposes two types of premises: (1) basic assumptions concerning the entire accounting system and (2) specific purpose-oriented hypotheses in order to propose some alternative treatments.

In this paper, the basic premise is that accounting for capital is an interesting activity because its consequences impact a variety of stakeholders in different ways. Furthermore, I assume that differences in the perspectives on capital maintenance and changes of the reporting standards can be explained by value judgments in respect of the objective that a dominant group of stakeholders or a regulating body seeks to achieve.

From the historical insights above, we can conclude that the capital maintenance concept has evolved since the 19\(^{th}\) century as a response to changes in a business environment. More precisely, the purpose of financial reporting has changed, resulting in changes in the concepts of capital and performance. Table 1 presents a summary of the three main modern views of capital maintenance.

**Table 1: Modern capital maintenance views**

| Type of accountability       | Purpose of reporting                        | Example                                                                 | Reporting unit                      | Type of capital maintenance       |
|------------------------------|--------------------------------------------|-------------------------------------------------------------------------|-------------------------------------|-----------------------------------|
| Decision usefulness          | Provide information for investors’ decision| Disclosure by listed groups (based on IFRS)                             | Parent of a group of companies      | *Net Assets* based on stocks of assets and liabilities |
| Stewardship                  | Inform shareholders and protect creditors  | Disclosure by corporations (based on Company Law)                       | Individual entity                   | *Dynamic* based on flows of profits |
| Corporate social responsibility | Inform all types of stakeholders and prevent abuses | Disclosure of sustainability reports (often voluntary)                  | Parent of a group of companies      | *Sustainable*\(^{20}\) (mostly based on flows of resources) |

As far as financial reporting by listed companies is concerned, the purpose of disclosure is to provide useful information for investors’ decision-making. For

\(^{9}\) Mattessich, R.: *Critique of accounting*. Westport, 1995, p. 81.

\(^{20}\) Although the author supports the sustainability view, this theoretical approach is still in its infancy. See for example Garcia, C.: *Accounting and Law for Equity Capital and Corporate Sustainability*, European Company Law, 17(5) 2020, p. 176-182.
that purpose, the net assets view appears dominant, at least for the last two decades, because it tends to emphasize the net worth of the reporting entity. The modern view of capital maintenance in IFRS is based on comprehensive income, which corresponds to the increase in net assets:

Financial capital maintenance. Under this concept, a profit is earned only if the financial (or money) amount of the net assets at the end of the period exceeds the financial (or money) amount of net assets at the beginning of the period, after excluding any distributions to, and contribution from, owners during the period.\(^\text{21}\)

The purpose of financial disclosure by non-listed companies is slightly different due to the smaller number of stakeholders. In the stewardship view, creditor protection is more emphasized than the short-term investment decisions of shareholders. The dynamic view, although not exclusive, is preferred because it emphasizes historical cost measurement and the earnings capacity of the business.

Last, reporting for business sustainability is still under development. From the most recent research, we can reasonably assume that a flows-based definition of performance including environmental and social resources would be relevant for that purpose. For example, the techniques developed by Ijiri and Lin\(^\text{22}\) consist of an extension of historical cost accounting and the dynamic view of capital maintenance. Rambaud and Richard\(^\text{23}\) adopt a different approach based on the concepts of human, environmental, and economic capital, but still as an extension of the dynamic theory. These flows-based approaches avoid the initial obstacle of assessing stocks of environmental and social risks. Besides, the impact of reporting for externalities on business performance is spread over time, which makes the change easier to implement for companies.

Regarding the recognition of environmental and social elements, several approaches were developed in prior literature. A complete inventory of these methods is beyond the scope of this article, but most of them consisted of broadening the definition of assets, liabilities, revenues, and expenses. Some examples of accounting treatments applied from the latest developments of

\(^{21}\) International Accounting Standards Board, The Conceptual Framework for Financial Reporting, 4.59 (2010).

\(^{22}\) Ijiri, Y.; Lin, H.: Symmetric accounting to integrate ‘goods’ and ‘bads’ in the double-entry framework: Logically stretching the domain of conventional accounting to the other half space, Journal of Engineering and Technology management, 23, 2006, p. 64-78.

\(^{23}\) Rambaud, A.; Richard, J.: The “Triple Depreciation Line” instead of the “Triple Bottom Line”: Towards a genuine integrated reporting, Critical Perspectives on Accounting, 33, 2015, p. 92–116.
French Company Law can be found below. French Action Plan for Business Growth and Transformation, or Loi PACTE in French, created in 2019 the obligation for large companies to monitor and report environmental and social issues including subsidiaries and subcontractors.\(^\text{24}\) To date, the main effect of the Loi PACTE was a series of legal actions against multinational groups based on insufficient or misleading disclosure, rather than a default of monitoring. Most procedures are still under deliberation, but the risk of being sued on a group basis is a major change for French multinationals. From this new obligation for large companies, what kind of elements should be recognized in accounting?

A first approach would be to account for a provision for ‘subcontractor monitoring’, or ‘subsidiary monitoring’ that would reflect the environmental and social risks associated with the legal obligation created by the Loi PACTE. Technically, this provision would be accrued as a percentage of transaction amounts between the parent company and the subcontractors or subsidiaries. This method is already used for product returns and customer claims, and it could be broadened to encompass more diffuse risks like social and environmental risks.

Other methods could also be used to implement sustainable capital maintenance in the frame of IFRS through the recognition of provisions. For example, it is possible – although not common in practice – to account for environmental liabilities from a stock-based measurement of commitments. Another alternative would be to impair the productive assets that generate environmental and social externalities, as well as the intangible assets that reflect corporate reputation. This last method would allow assessing environmental and social risks as part of a group of assets, which may appear relevant in cases where those elements cannot be identified separately.

A second approach would be to account for environmental and social risks, assessed as a percentage of the economic output of the company, as a non-distributable reserve in equity.\(^\text{25}\) Unlike the provision approach above, amounts allocated to the sustainability reserve would not be treated as expenses. Given the lack of reliability of available measurement methods, and the myopia of financial investors regarding net income, this approach advocates for a holistic treatment of environmental and social costs as a kind of extension of the legal reserve. It would enhance capital disclosure transparency and allow for the

\(^{24}\) Loi n° 2019-486 du 22 mai 2019 relative à la croissance et la transformation des entreprises, available at : https://www.legifrance.gouv.fr/loda/id/JORFTEXT000038496102/2020-11-29/

\(^{25}\) For more details, see Garcia, C.: Accounting and Law for Equity Capital and Corporate Sustainability, European Company Law, 17(5) 2020, p. 176-182. Accounting for sustainable capital maintenance investigated in the next section adopts this second method, however, research in this field is still in infancy.
reduction of distributable amounts without disrupting the measurement of net income.

Back to the example of the French Loi PACTE monitoring duty above, the sustainability reserve could be accumulated as a percentage of transaction amounts between the parent company and monitored entities. The percentage itself could be decided externally or internally based on industry and country characteristics, for example in the case of financial discount rates for impairment tests. Indeed, it could also encompass broader risks like natural disasters or sanitary emergencies based on industry-specific assumptions.26

4. ACCOUNTING FOR CAPITAL AND SUSTAINABILITY RESERVES

As described in Section 2, the modern view of capital maintenance in IFRS is based on comprehensive income, which corresponds to the increase in net assets. Since the scope of comprehensive income is broader than that of net income in the dynamic view, the concept of capital maintenance is less conservative. This feature reflects in fact the lack of concept of capital in IFRS. Accordingly, there is an opportunity to propose a European regulation to enhance corporate transparency and place more emphasis on capital maintenance.

The proposals in this section build upon the theoretical advancements of the Japanese Conceptual Framework of Financial Accounting. This standard proposed a dual definition of capital: one from the viewpoint of assets and liabilities and the other from the viewpoint of ownership rights.27

26 Although the reliability of such measurement is subject to criticism, the author supports the development of some approaches based on the current practices of insurance companies regarding business-specific risks. For more details on the pros and cons of estimates regarding sustainability reserves, see Garcia, C.: Accounting and Law for Equity Capital and Corporate Sustainability, European Company Law, 17(5) 2020, p. 176-182.

27 Noguchi, A.: Analysis of Dual Capital Concept: from Dual Measurement to Dual Recognition of Income, Academy of Accounting and Financial Studies Journal, 18(3), 2014, p. 7-20.
Table 2: Categories of Elements in Net Assets

| Ownership | Realised transactions | Unrealised transactions |
|-----------|-----------------------|------------------------|
| Shareholders of the parent company | Parent company’s share of net income | Parent company’s share of the OCI |
| | Results of the shareholder equity transactions | Other accounting adjustments |
| Third parties | Minority interests share of the net income | Minority interest share of the OCI |
| | | Unrealised non-shareholder equity transactions |

According to Table 2 above, only the top-left cell includes transactions that affect shareholder equity: the parent company’s share of group net income and the shareholder equity transactions. All the elements contained elsewhere should be reported in the net assets section, separate from shareholder equity. The result is the following format for the part of the net assets in financial statements.

Table 3: Presentation of Net Assets and Shareholder Capital

| Shareholder capital | |
|---------------------|--|
| Share capital and capital surplus | xxx |
| Retained earnings | xxx |
| Other reserves | xxx |
| Treasury stock (including share buybacks) | xxx |
| **Total shareholder capital** | xxx |
| Accumulated other comprehensive income | xxx |
| Sustainability reserve | xxx |
| Other elements of net assets (including convertible bonds and hybrid instruments) | xxx |
| Non-controlling interests | xxx |
| **Total net assets** | xxx |

28 Accounting Standards Board of Japan: *Conceptual framework of financial accounting*, Tokyo, 2006.

29 García, C.: *Accounting and Law for Equity Capital and Corporate Sustainability*, European Company Law, 17(5) 2020, p. 179.

30 Sustainability reserve, an element of equity that reports environmental and social risks, is a new element proposed by García, C.: *Accounting and Law for Equity Capital and Corporate Sustainability*, European Company Law, 17(5) 2020, p. 179.
In the proposed format of reporting above, total shareholder capital reflects the claims to shareholders based on realized transactions. “Share capital and capital surplus” is the original investment paid by shareholders, “retained earnings” are realized profits earned within the business and not yet distributed as dividends, and “other reserves” are those constituted based on specific statutory provisions. The following four items do not belong to shareholder capital: “Accumulated other comprehensive income” reflects some unrealized adjustments in value, “Sustainability reserve” could be used as a kind of legal provision for environmental and social risks, “Non-controlling interests” report minority shareholders’ interests, and “other elements of net assets” report the equity part of hybrid equity like convertible bonds.

Next, the case of Nissan, a multinational car manufacturing group, can be used as an illustration of the model above, and how it could be extended to implement sustainable capital maintenance in practice. Nissan is listed both on the Tokyo Stock Exchange and the NASDAQ. From its tight relationships with its business partner and main shareholder Renault, Nissan has chosen to adopt IFRS voluntarily. Accordingly, capital is disclosed as “net assets”, the difference of assets and liabilities in the decision usefulness approach defined in section 3.

However, Nissan also discloses additional information about the elements of net assets. A careful look reveals that the upper part of net assets is consistent with the dynamic concept of financial capital maintenance. On the one hand, common stock and capital surplus show the original contributions from shareholders (amounts to maintain) while on the other hand, income earned from the business is disclosed as retained earnings. This format is common in practice, but it is not mandatory in IFRS.

Further development of this model of disclosure would be to create a sustainability reserve in the lower part of net assets. This item would be disclosed separately from retained earnings to report the future negative impacts of social and environmental risks, and the reserve could not be used for dividend distribution. The creation of this new quantitative item, the sustainability reserve, is necessary to achieve a sustainable view of capital maintenance for two reasons. First, the assessment of environmental and social risks, even as a gross approximation, is essential to recognize their existence and communicate them to shareholders. In other words, disclosing a financial assessment of risks would constitute a signal for investors and raise the awareness of businesses on sustainability issues. Second, allocating part of retained earnings to a non-distributable reserve would indeed prevent excessive dividend distributions.
To conclude, transparency regarding the part of the net assets is an important issue in financial reporting, and it would not be costly for companies to adopt a uniform standard. This would allow for capital maintenance based on ownership rights and excluding unrealized adjustments in value. Furthermore, allocating part of profits to a sustainability reserve would be a valid way to implement sustainable capital maintenance defined in section 3.

5. CONCLUSION

In light of the most recent events, capital maintenance is certainly a concept that deserves consideration. Unlike prior literature that focused mainly on accounting for inflation, this research attempted to shed light on the potential use of capital maintenance in the viewpoint of corporate sustainability.

After conducting a historical review, three purpose-oriented views were identified in modern reporting: the net assets, dynamic and sustainable capital maintenance views. Unlike the net assets view currently enforced in IFRS, the sustainable view would broaden the scope of corporate accountability. The article claims that sustainable capital maintenance should be adopted in financial reporting in order to inform all types of stakeholders about corporate sustainability and that the new accounting methods should be developed to complement the loopholes of modern disclosure standards.

Table 4: Illustration from Nissan’s Balance Sheet (2019)\(^{31}\)

| Net assets | Illustration from Nissan’s Balance Sheet (2019) |
|------------|-----------------------------------------------|
| **Shareholders’ equity** | **Dollars** | **Dollars** |
| Common stock | 605,814 | 605,814 |
| Capital surplus | 815,913 | 814,682 |
| Retained earnings | 4,921,722 | 4,961,980 |
| Treasury stock | (139,970) | (139,457) |
| **Total shareholders’ equity** | **6,203,479** | **6,243,019** |
| **Accumulated other comprehensive income** | | |
| Unrealized holding gain and loss on securities | 68,179 | 30,004 |
| Unrealized gain and loss from hedging instruments | 9,537 | 4,762 |
| **Adjustment for revaluation of the accounts of the consolidated subsidiaries based on general price level accounting** | (13,945) | (30,882) |
| Translation adjustments | (733,571) | (790,131) |
| Remeasurements of defined benefit plans | (135,967) | (154,097) |
| **Total accumulated other comprehensive income** | (805,767) | (940,344) |
| **Share subscription rights** | 84 | — |
| **Non-controlling interests** | 303,914 | 309,835 |
| **Total net assets** | **5,701,710** | **5,623,510** |

\(^{31}\) From Nissan Annual Report FY 2019, available at: https://www.nissan-global.com/EN/DOCUMENT/PDF/AR/2019/AR19_E_All.pdf
Next, this research addressed the implementation of sustainable capital maintenance. Reporting for equity in this approach would rely on three main elements: the traditional concepts of contributed capital and retained earnings, and a new element called “sustainability reserve”, which would be a quantitative assessment of environmental and social risks. Some examples of flows-based and stock-based measurement methods were proposed based on the French Loi PACTE monitoring duty. Similarly to a legal reserve, the sustainability reserve would not be distributable as a dividend; neither would it reduce reported net income. Since it would not affect other accounting aggregates except retained earnings, this method would be compatible with the current IFRS standards.

To conclude this article, capital maintenance should be rediscovered as an essential tool for sustainability reporting, as well as for subsequent regulation. Creating simple disclosure obligations regarding environmental and social risks in financial accounting would not only inform the public, but it would also create a basis to measure externalities in the economy. This information, in turn, could be used for the purpose of environmental policy or taxation.

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