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WHO IS THE ULTIMATE MASTER OF CONTRACTUAL, REGULATORY, DISCRETIONARY AND RESIDUAL CASH FLOWS?

An answer from the standpoint of Corporate Governance

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Abstract

This paper sets forth a framework of analysis that links contractual, discretionary, regulatory and residual cash flows with decision rights over them. To attain this purpose, firstly we introduce the standard incremental cash flow model, underlying its main limitations. Secondly, we move on bringing to light cash flows to senior management and directors, as well as the so-often neglected investment portfolio. Next, we settle down to what we are going to call the compact cash flow model that comprises five building blocks, namely those arising out of assets, those addressed to owners, creditors, managers and directors, and lastly the company's investment portfolio. Afterwards, contractual, discretionary, regulatory and residual cash flows are enlarged upon. Last of all, we focus on decision rights over every constituent of each building block. This issue carries weight in Corporate Governance since stakeholders who claim or exercise decision rights, also could trespass on the rules of the game, becoming better off to the expense and damage of other stakeholders.

JEL: G30, G34

Key words: corporate governance; contractual, regulatory, discretional and residual cash flows; decision rights; incremental cash flow model.

Institutional disclaimer

Statements or opinions in this paper are attributable to the author only, and the University of Cema disclaims any responsibility for them.

INTRODUCTION

Corporate Governance has been profiting from contributions stemming from many quarters: law and economics, sociology, financial economics and Corporate Finance. In the latter field we find out seminal papers written, among others, by Fama and Jensen (1983), Jensen (1986), Jensen and Smith (1985), Jensen and Meckling (1976), that focused on residual cash flows and property rights, providing noticeable insights to deal with agency problems that arise out of stakeholders' relationships in any organization. Following this line of enquiry, and taking advantage of the cash-flow model, research on conflicts of interests, rent-seeking and soft-budget constraint has been carried out by Apreda (1999, 2001, 2002b, 2003, 2005b).

Our contention in this paper is that there are at least four relevant and distinctive cash-flow categories. Namely contractual, regulatory, discretional and residual, that come in handy to understand many Corporate Governance issues[1], as soon as we ask to ourselves about the linkage between constituents of each category and the major claimers of decision rights.

In section 1, we deal with the structure of expected incremental cash flows by highlighting their fixed, variable and contingent features. Finally, we brief the conventional incremental cash flow model (ICFM).

Section 2 introduces the compact model of incremental cash flows, which enlarges the ICFM. Keeping such line of argument, we focus on the main players in the contest and allocation of cash flows: owners, directors, managers and creditors. Secondly, the investment portfolio of any company, which has been neglected so far, is shown as a stand-alone category of cash flows. Lastly, the compact model turns out to be a construct of five building blocks of cash flows, namely those from assets, towards creditors, owners, managers and directors, and the investment portfolio.

It is for section 3 to expand on contractual cash flows, while sections 4, 5 and 6 handle regulatory, discretionary and residual cash flows, respectively. Last of all, in section 7, we raise the question of who can claim decision rights over each constituent cash flow in the compact model. Ultimate power on cash flows may nurture opportunistic behavior with guile, bringing about damage and material losses to those stakeholders who fail to forestall and contend for any deviant usage of such power.

1. THE STRUCTURE OF EXPECTED INCREMENTAL CASH FLOWS

Let us assume we have defined a planning horizon

[1] On the semantics of Corporate Governance, see Apreda (2005a).

$$H = [\, t \,;\, T \,]$$

spanning from starting date at **t,** through ending date **T**. At the starting date, we have to assess certain incremental cash flow, **ΔCF(. ; t)**, where the dot between brackets stands for the particular variable which we are interested in. For example, let us take the variable "creditors", which leads to **ΔCF(creditors ; t)**. As a matter of fact, this is a building block consisting of interest payments, principal redemption, debt repurchase, and new debt issues, as we are going to develop in section 1.2.

Why do we busy ourselves with incremental cash flows instead of plain cash flows outright? Because we are interested in cash flows attributable only as from date **t** and that had not existed before[2].

1.1 THE THREE-TIERED STRUCTURE OF CASH FLOWS

For the assessment of incremental cash flows, we have to take into account three distinctive components: fixed, variable, and contingent ones.

Any time that the analyst attempts to work out cash flows, and regardless of the fact that they could carry on either fixed, variable, or contingent features, she must bear in mind that, whereas a few of them are deterministic, the most have a random nature. If the valuation occurs at the starting date of the planning horizon **H**, in almost all cases the assessment only gives an expected value. However, at the end of the planning horizon, the information is fairly reliable, and seldom random[3].

When itemizing those cash-flow components, it must be stressed that the more contractual they are, the more deterministic they become. In the opposite side, residual cash flows are basically stochastic as a whole.

a) Fixed component

It is the case of depreciation schedules for fixed assets, as well as contractually-fixed salaries[4] to be paid along the planning horizon. We have to charge them, irrespective of the company's performance. Another example is provided by those credits whose interest payments must be disbursed following a fixed-rate procedure.

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[2] By the way, this is the criterion widely used in capital budgeting and other valuation settings in Corporate Finance: regard as such only cash flows that are brought about by the project out of which they fail to take place.

[3] Bear in mind that after date **T** some correction or adjustments could follow on accountancy grounds and as a matter of fact. That is the rationale behind the expression "the information is fairly reliable, and seldom random".

[4] Exclusive of variable components, by all means.

b) Variable component

The variable component of any cash flow measures up an amount of money that depends either on quantities, volume, or the ups and downs of a suitable benchmark.

The more we sell of a certain good or service, larger cash flows will be associated with revenues, but also with costs. For these transactions the analyst counts either the units, or records the volume sold[5].

When the assessment is linked to the performance of a chosen index that increases or decreases along the horizon **H**, we also face a variable amount of cash inflows or outflows. For instance, and coming back to our former example based on cash flows to creditors, **ΔCF(creditors)**, let us assume that a particular creditor (a bondholder or a financial institution) agrees with the company to receive interest payments that will follow a floating-rate pattern, that consists in a rate chosen as benchmark to figure out the amount of interest to be paid [6], which will likely be different period after period.

c) Contingent component

This component hinges upon an underlying set of states of nature, each of them triggering off a different value. More precisely, *given a set of predictable states or conditions,* K_1 , K_2 ,, K_3 , … , K_N , *if state or condition* K_r *arises, then a well-defined cash flow*

$$\Delta CF(. ; t ; K_r)$$

will follow[7]*.* The analyst must choose which is the most likely state to crop up, or ultimately resort to expected values of the whole arrangement.

As an example drawn from the working capital structure, consider what a supplier charges the company for certain good on terms of quantity. Between x(1) and x(2) a price follows, but beyond x(2) and below x(3) another price, frequently less than the former will apply, and so on.

Another example is provided by options-like rewards[8], which establish that below certain contractual amount of money, called the exercise price, there will be no cash flows springing out of an underlying asset (financial or non-financial).

[5] Likewise, we can argue about buying goods or services.
[6] For example the Libor-180, which is used for payments along semesters, is reset at the beginning of each semester on behalf of the current values available in the bond market, hence supplying with the accrual rate for the period.
[7] Non-finite sets comprising either states or conditions are out of the scope of this paper.
[8] In this context, the options refer to the purchase, not the selling, of something in the future.

Instead, above the exercise price, it will be for the beneficiary to claim those cash flows in excess of such price[9].

1.2 INCREMENTAL CASH FLOW MODEL

The conventional setting for the incremental cash flow model[10] (as from now, the ICFM) runs as follows:

$$\Delta \text{ CF (assets)} = \Delta \text{ CF (creditors)} + \Delta \text{ CF (owners)} \quad (1)$$

To make this identity fully operational, we have to assume some qualifications about the internal structure of cash flows in the above identity:

i) **Δ CF (assets)**

This building block is set up by detracting from total revenues the whole structure of costs (but for those related with medium- and long-term interest payments), as well as all provisions for working capital and non-current assets.

Broadly speaking, we have to regard this building block like a stand-alone expression that gives account of how much economic value the analyst expects to be created through the planning horizon.

ii) **Δ CF (creditors)**

It comprises either interest payments (those which we did not take into account to obtain cash flows from assets), principal redemptions, and early repurchase of debt as well[11].

This building block also includes new debt issues, which are cash flows of opposite sign than the former ones; in fact, they are inflows to the company. The expression “creditors” mean here banks and bondholders (institutional investors mainly) alike.

iii) **Δ CF (owners)**

It consists of dividend payments and early repurchase of equity, as well as new equity issues to finance the company (the latter convey a negative sign, in contrast with the two former cash flows that carries the positive sign).

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[9] In such setting, the beneficiary pays the exercise price outright, and can get the difference between the market price at that time with the exercise price.

[10] The appendix at the end of the paper furnishes with a minimal background about the ICFM.

[11] The treatment of interest payments in the ICFM carries on the following logic: if they stem from short-term liabilities cash flows are allocated above the EBIT line, whereas the interest accrued from medium-and long-term liabilities are kept in this building block.

When the organization is a stock-company, we are going to speak about cash flows to shareholders. Otherwise, we refer to cash flows to equity-holders or owners, briefly.

1.3 A CRITICAL APPRAISAL OF THE ICFM

If we took the ICFM up to its ultimate consequences, then (1) would say that whatever the company creates ends up being distributed among creditors and equity-holders. But such behavior, systematically carried out period after period, would prevent the company from becoming sustainable and, even worse, from growing at all.

Somebody could point out that growth opportunities and sustainability are properly handled any time we design the provisions for non-current assets. But if such were the case, and from a corporate governance standpoint, we would be allowing three unwarranted developments:

- discretionary allocations of what are called agency-consumption goods;
- faltering accountability processes;
- and lacking in transparency.

In next section, we are going to remold the ICFM, so as to avoid its current shortcomings.

2. THE CASH-FLOW COMPACT

It is for the incremental cash flow model to meet two goals:

- to track down value creation out of assets;
- to figure out likely applications of such value to creditors and owners.

Before using this model in Corporate Governance, however, we must sharpen it up, mainly by coping with two distinctive issues:

– to allow for the essential players enter the stage;
– to retrieve from oblivion the investment portfolio any company manages in real life, as it were an internal mutual fund.

THE ESSENTIAL PLAYERS

The ICFM is predicated upon the next relationship:

$$\Delta \text{ CF (assets)} = \Delta \text{ CF (creditors)} + \Delta \text{ CF (owners)}$$

which, however, does not bring to light the underlying cash flows to be claimed by two big players in the governance of any kind of organization, namely the senior management and the Board of Directors.

Therefore, we have to modify the conventional model, by adding a new building block of cash flows as important as the ones related with creditors and equity-holders as it is shown next:

(2)

$$\Delta \text{ CF (assets; net)} = \Delta \text{ CF (creditors)} + \Delta \text{ CF (owners)} + \Delta \text{ CF (senior management and directors)}$$

Two qualifications are due here to ensure consistency in the former relationship:

- Whereas the Earnings and Losses Statement do contain valuable information about the compensation package of managers and directors, it does not provide all the relevant information. Sometimes this is left to off-sheet remarks. However, there is wide-ranging evidence that most companies are not so transparent on these matters as would be advisable. All in all, either internal or external analysts could reach satisfactory albeit incomplete assessments to figure out this kind of incremental cash flows.

- It goes without saying that cash flows generated by assets in (2) do not match the expression in (1). In fact, we have detracted from assets in (1) the compensation package of managers and directors in order to set up expression (2). However, we are going to drop the expression “net” when no confusion arises.

THE INVESTMENT PORTFOLIO

In current university textbooks, when the conventional ICFM is introduced, some simplifications are understandable for the sake of illustration (see, for instance, the book by Ross et al., 2005, chapter 2). In point of fact, when designing the provisions for non-current assets it is assumed that they only comprise fixed assets, in utter disregard of medium- and long-term investments in financial assets. On the other hand, provisions for working capital frequently fail to include short-term investments in financial assets. From a corporate governance perspective, however, we cannot do without the investment portfolio built up out of those financial assets. Therefore, cash flows from this portfolio, which we are going to denote as

$$\Delta \text{ CF (investment portfolio)}$$

will make for another building block, as it is shown in (3).

Among medium- and long-term financial investment we can notice government bonds and notes, corporate stock and bonds, financial hybrids (convertible bonds, convertible preferred stock, bonds with warrants), bank bonds. Short-term investment mainly consists of term-deposits issued by banks, Treasury bills, commercial paper.

Such portfolio fulfills two broad and essential objectives:

- it performs as a provider of contingent liquidity;
- it carries out the role of a sinking-fund through which the company expects to finance new growth opportunities[12].

Those who handle this portfolio have to meet a fiduciary role. As a matter of fact, managers and directors remain accountable for their fiduciary duties towards owners and the company. Whereas most of these fiduciary duties are explicitly disclosed in the founding charter (or across corporate and contract laws), this seems most regrettable, since no apparent monitoring or accountability methods constrain eventually the discretionary nature of these cash flows.

THE CASH-FLOWS COMPACT

After singling out both the compensation package and the investment portfolio, we can move on to the cash flow compact, which consists of five building blocks[13], namely

(3)

$$\Delta CF(\text{assets}) = \Delta CF(\text{creditors}) + \Delta CF(\text{owners}) +$$

$$+ \Delta CF(\text{senior management and directors}) + \Delta CF(\text{investment portfolio})$$

It's worth thinking this relationship a step further to make it operational, that is to say, to attach observable facts or procedures to the construct. In contradistinction with the right side of ICFM as portrayed in (1), now we get access to the main players in corporate governance:

a) equity holders, who bear residual rights and cash flows;

b) the Board and the senior management, whose fiduciary role entitles them, but also makes them accountable to owners upon discretionary and residual cash flows;

c) creditors, whose claims are mostly contractual, regardless of how well or badly the company will perform along the planning horizon[14];

[12] About sinking funds and their importance for Corporate Governance, see Apreda (2007b).
[13] The appendix at the end of this paper summarizes and contrast the standard with the compact models.
[14] To put it bluntly, non-compliance of debt commitments would trigger off default settings.

d) the investment portfolio, which comprises discretionary cash flows mastered by managers and directors in disperse-ownership structures, although in family-owned and closed companies it is for block-holders to rule over the investment strategy.

In section 7, we are going to profit from a different standpoint to cope with corporate governance matters.

3. CONTRACTUAL CASH FLOWS

Companies engage in manifold transactions on repeated and persistent patterns of agreement with third parties, either as inputs, throughputs or outputs. In many cases, the underlying cash flows are set under clear and enforceable contracts. This calls for a definition[15].

Definition 1 Contractual cash flows

*By **contractual cash flows** we understand those that meet the following restrictions:*

a) their nature, size, timing, source or destination are drawn up in a contract;

b) there is a mechanism to figure out these cash flows at the moment they will become either outflows or inflows;

c) in most cases, information about the binding contract belongs to the private domain;

d) counterparts obligate themselves and may contest each other bringing their case to court.

There are plenty of examples of contractual cash flows placed above the EBIT line, as well as in the provisions for working capital, either those that involve goods sold to regular customers, for instance, or services rendered by suppliers of labor, technology, raw material, managerial skills, finished goods and the like.

4. REGULATORY CASH FLOWS

This sort of cash flows are designed and enforced by the Government, either at federal, state or municipal levels; or by any regulatory agency legally entitled to request cash flows from companies in the private sector. Transactional environments actually mean for the companies not only a collection of alternative

[15] In this paper, definitions do not intend to give a crisp and definite meaning. They should be regarded as working statements for the sake of semantics.

markets where inputs and outputs are regularly traded, but also regulatory environments that set the rules for companies to meet their distinctive goals.

Definition 2 Regulatory cash flows

*By **regulatory cash flows** we mean those that exhibit the following features:*

a) *their nature, size, timing, source or destination are established by the regulator;*

b) *there is a mandatory methodology to figure out the amount of cash flows to be delivered to the regulator as well the circumstances under which the company may claim some devolution if any;*

c) *information about the structure, deadlines, and constituents of these cash flows belongs to the public domain;*

d) *they are compulsorily collected and the regulator is able to impose sanctions whenever the company fails to meet its liabilities.*

Although most components of regulatory cash flows are fixed or variables, there is room for contingencies, as when we must give heed to alternative settings linked with likely changes in the methodology, the scaling of taxes, or mechanisms of discount that brings tax relief to some activities with social implications.

5. DISCRETIONARY CASH FLOWS

The essential feature of these cash flows lies on the power of some decision-makers within the company to carry out the following tasks:

- increase or decrease any budgeted cash flow;
- set up a new category of cash flow;
- leave out some existing category of cash flow;
- shift a proportion of certain cash flow to another one.

Although discretionary power over cash flows is essential for every kind of company, criteria for the allocation of cash flows may foster hidden agendas or self-dealing transactions from three main players: the owners, the Board of Directors, and the Senior Management.

However, we have to bear in mind that if financial distress threatened the company's survival, creditors should be added to the former list.

Definition 3 Discretionary cash flows

*By **discretionary cash flows** we understand those that convey the following features:*

a) *their nature, size, timing, source or destination are brought into existence by owners, the Board of Directors, or the Senior Management;*

b) *there is an internally devised methodology to work out the amount of inflows or outflows;*

c) *information usually belongs to the private domain;*

d) *the commitment and responsibility of the player who decides the scope and range of these cash flows should depend on accountability mechanisms that the company's governance had set forth in the founding charter or the governance bylaws of the organization.*

6. RESIDUAL CASH FLOWS

At the core of this concept we find the idea of a residual, which amounts to what remains once we detract from revenues all the relevant costs that lead to expected cash flows brought about by assets, along the span of time defined by the planning horizon. That is to say:

$$\Delta \text{ CF (assets)} = \text{EBIT} - \text{taxes} + \text{depreciation} -$$

$$- \text{ provisions for working capital} - \text{provisions for non-current assets}$$

As many items among the categories of revenues and costs exhibit variable or contingent components, in fact stochastic ones, it follows that the net income also becomes stochastic and residual.

Therefore, cash flows from assets are risky, because there will be a gap between their assessment at date **t** and their historical realization at time **T**. In other words,

$$\text{Residual risk from assets} = E[\Delta CF(\text{assets}; t)] - \Delta CF(\text{assets}; T) \neq 0 \quad (4)$$

On the other hand, recalling (1),

$$\Delta \text{ CF (assets)} = \Delta \text{ CF (creditors)} + \Delta \text{ CF (owners)}$$

and singling out cash flows directed to owners, we get

(5)

$$\Delta \text{ CF (owners)} = \Delta \text{ CF (assets)} - \Delta \text{ CF (creditors)}$$

As cash flows from assets are residual and risky, whereas cash flows to creditors hinge upon contractual performance and, therefore, they become less risky and more deterministic, the difference depicted in (5) tells us that cash flows to owners are risky and residual. Therefore, we can bring forth the following definition[16].

Definition 4 Residual cash flows

*By **residual cash flows** we refer to those conveying the following features:*

a) their nature is established in terms of cash flows brought about from assets;

b) their structure comprises random cash flows as well as deterministic ones;

c) they are worked out by substracting taxes, provisions to working capital and to non-current assets from the EBIT, and adding non-cash assets like depreciation or amortization;

d) most information usually belongs to the private domain, but external assessments are feasible from public information and the analyst appraisal of expected rates of change for relevant variables.

In contradistinction, but building a bridge with this notion, some scholars have successfully delved into residual control rights (see, for instance, Hart and Moore, 1990; and also Zingales, 1997), which are those claimed by owners or the members of the Board whenever the founding charter or contracts do not provide with clear answers to cope with material decisions arising in the real world.

If we now make the contrast between an ex~ante (budgeted) and ex~post (historical) assessment of cash flows to owners, it follows that the underlying residual risk can be formatted as

(6)

$$\text{Residual risk to owners} = E[\Delta CF(\text{owners}; t)] - \Delta CF(\text{owners}; T) \neq 0$$

which tells us that owners ultimately bear the residual risk of cash flows entailed in (5).

[16] We could have framed a broader definition, stressing the fact that any residual cash flow arises out of the difference between positive and negative cash flows. But such approach seems not essential to the scope of our research, by which its key point lies on revenues less costs, so that the residual cash flows stem from earnings before taxes and interest.

As the owners are the ultimate bearers of the net income under the guise of dividends, they claim residual and risky cash flows, as Fama and Jensen (1983) so neatly stated in their paper.

If we now recall that Hansmann (1996) defined ownership rights as those who entitle their recipients with

- a claim to residual cash flows generated by the company,
- and control rights, mainly through the exercise of voting and board composition,

it couldn't come as a surprise that residual cash flows had exhibited from the start such paramount status in the study of Corporate Governance.

7. A GOVERNANCE VIEWPOINT ON THE CASH-FLOWS COMPACT

It is worth unfolding the main message contained in relationship (3):

$$\Delta \text{ CF (assets)} = \Delta\text{CF(creditors)} + \Delta\text{CF(owners)} +$$

$$+ \Delta\text{CF(senior management and directors)} + \Delta\text{CF(investment portfolio)}$$

On the left hand of this identity we find the source of expected value creation. On the right hand, we keep track of who are the main stakeholders contesting for the distribution of incremental cash flows, and also due regard is given to the so often neglected internal investment portfolio.

From this viewpoint, the compact model stands as a benchmark against which we can monitor how those relevant players are getting along when carrying out their decision rights over cash flows.

Why did creditors, owners, managers and directors become so highly noticeable? At least, there are three reasons:

a) They are definitely the movers and shakers of any organization. In Anglo-Saxon styles of governance, however, the role of creditors seems to be kept in the shadows in contrast with the paramount importance given to the others. But in German or Latin styles of governance, creditors are on equal foot with the other claimers[17].

[17] Roe (2003) is a standard reference on this topic.

b) Conflicts of interest among owners, directors, managers and creditors are widespread and by far more persistent along time than the ones arising with or against other stakeholders[18].

c) Good relationships among the four players call for a covenant to manage their conflicts of interests. Such a covenant should be embedded into the founding charter, or still better, in the Statute of Governance[19] that distinctively gives account of the following issues:

   ownership rights;

   control rights;

   decision rights;

   incentives;

   creditors' safeguards.

The compact model also points out to a darker message. There are many chances, even in well-framed governances, for opportunistic or arbitrary behavior with guile that could end up in the fraudulent handling of cash flows[20].

7.1 DECISION RIGHTS

Broadly speaking, by decision rights we understand those rights to effectively carry out decision-making and problem-solving processes.

Narrowing down such meaning to the context of corporate governance, *decision rights are those entitled to managers and the Board members by the founding charter and internal bylaws of the organization.* They are brought into practice through a systematic, persistent and rational behavior whose main outcome should be the attainment of the company's primary goals.

From the variegated sort of decision rights we single out those linked to cash flows. In point of fact, an impressive amount of decision-making becomes operational only when mastery over cash flows is truly granted. Such mastery shows two opposite dimensions:

- a positive one which stems from governance principles;

[18] Jensen-Smith (1985) seems a consequential paper to do research about conflicts of interests.
[19] Apreda (2007a) was among the first to stress the importance of this statute for the improvement of corporate governance.
[20] The strong linkage between conflicts of interests and incremental cash flows can be tracked down to Apreda (2002b).

- a negative one that evolves when good practices and governance principles are trespassed.

By far, this seems a topic that merits close examination, what falls within the scope of next subsection.

7.2 DECISION RIGHTS OVER CASH FLOWS

How could we profitably link the building blocks of cash flows and the four main categories developed in former sections, with the subject matter of Corporate Governance? Among other available ways, we choose here a linkage between any cash flow as a constituent in each building block portrayed in (3), with decision rights claimed by some stakeholder over such constituents.

Δ CF (owners)

With the help of Exhibit 1, we can move on to itemizing the owners' distinctive cash flows within this building block, seeking for their fitting with decision rights.

Exhibit 1

BUILDING BLOCK: CASH FLOWS TO OWNERS
Δ CF (owners)

BUILDING BLOCK CONSTITUENTS	CASH FLOWS CATEGORIES	DECISION RIGHTS OVER EACH CONSTITUENT
Dividend payments	main: residual others: discretionary, regulatory	owners or the Board
plus equity repurchase	main: discretionary others: regulatory	the Board or the management
minus new equity issue	main: discretionary others: regulatory	owners or the Board

In many countries where law enforcement and the compliance of the Constitution become hard to be enacted, family-owned companies usually resort to a large assortment set of procedures to make as discretionary the handling of these cash flows as to damage or expropriate other stakeholders' rights[21]. An outstanding mechanism consists in taking advantage of the so-called

[21] Faccio et al. (2001) enlarge upon this issue.

tunneling[22], whereas a most favored vehicle to bring tunneling into completion are pyramids[23].

But in those governance backgrounds where ownership attains high levels of dispersal, it is the Senior Management who can devise opportunistic mechanisms like the following:

- to steal owners from their cash flows,
- trigger off new equity issues to grant themselves the windfall of lenient stock options schemes,
- foster stock repurchases to get rid of contestant minorities,
- or increase their consumption of agency goods (new premises and corporate jets, travel rewards, and likewise fringe benefits or perks).

Enron is a case in point that shows the extent to which bad governance practices can disgrace a company[24].

Δ CF (creditors)

Both global markets and the pervasive influence of institutional investors bring on consequential matters for cash flows to creditors (see Exhibit 2). At this juncture, the compact model becomes handy for checking out whether creditors profit at the expense of other stakeholders. Namely, board composition, short-termism and protective covenants.

The first issue means that institutional investors or banks try and get Board's representatives, whose main outcome consists of a new power design within the organization, and tractable reallocations of cash flows through the compact model.

As for short-termism[25], pressures from institutional investors constrain managers in their decision-making in such a way that they ultimately substitute financial myopia for sound judgement in their decision-making.

Protective covenants in debt contracts usually convey tight budget constraints, but also restrain strategic decisions that impact dividends, new debt or stock

[22] More background in Friedman et al (2003).
[23] Some interesting remarks on pyramids are developed in Khana and Palepu (1999).
[24] On Enron, see Apreda (2002a).
[25] Demirag (1998) is still a very valuable guide to appraise short-termism in many OECD countries.

financing, repurchase of debt or stock, the structure of incentives and the composition of the investment portfolio[26].

Exhibit 2

BUILDING BLOCK: CASH FLOWS TO CREDITORS
Δ CF (creditors)

BUILDING BLOCK CONSTITUENTS	CASH FLOWS CATEGORIES	DECISION RIGHTS OVER EACH CONSTITUENT
Interest payments	main: contractual others: regulatory[27]	management or the Board
Plus principal payments	main: contractual others: regulatory[28]	management or the Board
plus debt repurchase	main: discretionary others: regulatory	management or the Board
minus new debt issues	main: contractual others: discretionary	owners, or the Board

Δ CF (investment portfolio)

In Exhibit 3, we have another grouping of cash flows that, when used opportunistically, could prevent the company from attaining its primary goals and, furtherly, debasing the quality of its governance. Those cash flows arise out of any purchase or selling of financial assets that the company's Treasurer carries out to build up an investment portfolio to meet two essential tasks:

- to become a liquidity provider;
- to hoard up resources for new growth opportunities.

We must bear in mind that whereas securities purchased to build up this portfolio are financial assets for the company, they stand for liabilities from the issuers' side. Hence, the column "cash flows categories" refer to that side. Last column, however, "decision rights over each constituent", spells out who are the masters, as regards their decision rights within the company, to purchase those assets.

[26] Smith and Warner (1979) were among the first to focus on Bond Covenants.
[27] In some countries, Central Banks constrain financial institutions to stick to some accrual mechanisms but forbid others.
[28] Whereas bullet bonds are fashionable in some countries, bonds which repay principal through a schedule of partial payments may be favored in others.

Exhibit 3

BUILDING BLOCK: INVESTMENT PORTFOLIO
Δ CF (investment portfolio)

BUILDING BLOCK CONSTITUENTS	CASH FLOWS CATEGORIES	DECISION RIGHTS OVER EACH CONSTITUENT
Government bonds	main: contractual others: discretionary, regulatory	the management or the Board
Plus corporate bonds	main: contractual others: discretionary, regulatory	the management or the Board
Plus corporate stock	main: residual others: discretionary, regulatory	the management or the Board
Plus corporate financial hybrids	main: contractual others: discretionary, regulatory	the management or the Board
Plus financial assets stemming from cross-holdings	main: discretionary others: regulatory, residual, contractual	owners or the Board

Δ CF (senior management and directors)

We face here a building block whose nature is two-edged and pervasive:

- its main upside consists in fostering the performance of both management and directors, granting stewardship, and keeping talent from deserting the company;

- in contradistinction, its downside accounts for discretionary power over cash flows that could end up in outrageous consumption of agency goods or, still worse, shameless dealing and wheeling (Exhibit 4 summarizes the main issues).

Many governance failures eventually stem from agency costs, that is to say, costs arising from agency relationships. Some of them are positive, like incentive

programs and perks[29]. But negative agency costs lead to bad governance and worse performance. As Mark Roe (2003) has pointed out, they can be mapped out to stealing resources (diversion) or shirking (incompetence).

Exhibit 4

BUILDING BLOCK: CASH FLOWS TO MANAGEMENT AND DIRECTORS
Δ CF (managers and directors)

BUILDING BLOCK CONSTITUENTS	CASH FLOWS CATEGORIES	DECISION RIGHTS OVER EACH CONSTITUENT
Basic salary or fixed fees	main: contractual others: discretionary, regulatory	the Board or the management
plus bonuses and bonds defined over performance measures	main: discretionary others: contractual	the Board or the management
plus contingent compensation (stock options, appreciation rights, restricted stock, phantom stock)	main: discretionary others: contractual, regulatory	owners or the Board
plus financial hybrids (convertible bonds, preferred convertible stock, bonds with warrants)	main: discretionary others: contractual, regulatory	owners or the Board
plus retirement plans	main: discretionary others: contractual	owners or the Board
fringe benefits and perks	main: discretionary others: contractual	the Board or the management

Δ CF (assets)

The most debatable items in this building block lie on provisions for working capital and non-current assets. A conservative criterion should be to allocate only

[29] Murphy (1998) reviewed the ups and downs of compensation packages; an updating is found in Hall and Murphy (2003). A provocative essay in the aftermath of corporate scandals is the book by Bebchuck and Fred (2004).

cash flows required for maintenance of non-current assets and reasonable amounts of money to meet working capital needs. However, we must ask ourselves about the extent to which limits could be set. The Board must lay the foundations for any increase or decrease in non-current assets and working capital levels that could be regarded as sound decision-making for the period.

By far, the building block of cash flows from assets is more variegated than the other four as Exhibit 5 brings home. This should not come as a surprise since above the Ebit line we find out an impressive number of revenue and costs items that can be classified either as contractual, regulatory, contingent or residual.

Exhibit 5

BUILDING BLOCK: CASH FLOWS FROM ASSETS
Δ CF (from assets)

BUILDING BLOCK CONSTITUENTS	CASH FLOWS CATEGORIES	DECISION RIGHTS OVER EACH CONSTITUENT
EBIT	main: residual cash flows others: discretionary, contractual and regulatory	mostly on the side of the management, but there are decision rights contractually claimed by suppliers, customers, regulators and short-term finance providers
minus Δ CF (taxes)	main: regulatory others: discretionary	the regulator gets decision rights, but the management can have a say when there is a choice of methodology or a fiscal subsidy
plus Δ CF (depreciation or amortization)	main: regulatory others: discretionary	claimed by management only when there is a choice of methodology
minus Δ CF (provisions to working capital)	main: discretionary others: contractual	mostly on the side of the management
minus Δ CF (provisions to non-current assets)	main: discretionary others: contractual	some decisions over fixed assets are taken by the Board only

CONCLUSIONS

This paper intended to answer two distinctive questions:

– How many categories of cash flows do seem relevant, at least for handling distinctive issues arising in Corporate Governance? The paper shaped up four broad categories: contractual, regulatory, discretionary, and residual cash flows.

– How do categories of incremental cash flows come in handy from the perspective of Corporate Governance?

To answer the last question we have introduced, firstly, the compact model of incremental cash flows that consists of five building blocks, one for each essential player in the governance game: owners, directors, managers and creditors, and a remaining distinctive building block that deals with the investment portfolio. Secondly, we stressed that the key point lays on who has decision rights over the constituents of each building block of incremental cash flows. Such power may enable some stakeholder to claim unwarranted decision rights over cash-flow constituents making him better-off than the remaining lot, to the extent of material losses, unfairness or even expropriation of the latter's legitimate rights.

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TECHNICAL APPENDIX
THE INCREMENTAL CASH FLOW MODEL

- ***Assumptions***

planning horizon: **H = [t; T]**

valuation date: at the beginning of the horizon.

inputs: ex~ante financial statements at **T**; ex~post financial statements at **t**; ex~ante valuation of other variables.

- ***Building Blocks***

$$\Delta \text{ CF (assets)} = \Delta \text{ CF (creditors)} + \Delta \text{ CF (owners)}$$

- ***The structure of building blocks***

1. ΔCF (operations) = EBIT – taxes + depreciation + amortization

2. ΔCF (assets) = ΔCF (operations) –

   – provisions for working capital – provisions for non-current assets

3. Δ CF (creditors) = interest + principal repayment +

   – debt repurchase – new debt issue

4. ΔCF(owners) = dividends + equity repurchase – new equity issue

- ***Toward the compact model***

$$\Delta \text{ CF (assets)} = \Delta \text{ CF (assets; net)} –$$

– ΔCF(senior management and directors) – ΔCF(investment portfolio)

- ***Notational assimilation***

$$\Delta \text{ CF (assets)} \approx \Delta \text{ CF (assets; net)}$$

- ***The compact model***

$$\Delta \text{ CF (assets)} = \Delta \text{ CF (creditors)} + \Delta \text{ CF (owners)}$$

+ ΔCF(senior management and directors) + ΔCF(investment portfolio)