CORPORATE RENT – SEEKING
AND THE MANAGERIAL SOFT – BUDGET CONSTRAINT

An Incremental Cash Flow Approach
to some Corporate Governance Issues

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Abstract

This paper seeks to expand on two topical strands in Government Finance and Political Science literature, rent-seeking and the soft-budget constraint, so as to bring forth a strong linkage between them in corporate governance environments. It hopes to accomplish this target by setting up a distinctive framework of analysis that hinges on incremental cash flows. Firstly, it claims that both rent-seeking behavior and the soft-budget constraint are worthy of being applied to corporate governance learning and practice. Secondly, the paper contributes to focus on cash-flows reliability and managers’ accountability. Thirdly, it is shown how conflicts of interest underlie rent-seeking behavior, and how the latter relates to the soft-budget constraint.

JEL: G30, G34, D72, D74, D82

Key Words: Rent-Seeking, Soft-Budget Constraint, Corporate Governance, Incremental Cash Flow model, Conflicts of Interest.
INTRODUCTION

It is frequent for a concept in any scientific development that, albeit it may spring from a particular field of knowledge, sooner or later it makes inroads into other branches either in the same science or others. This has been the case in Economics with a pair of concepts that were born and have been widely used in the realm of Public Finance since the 1970s, whereas they have come in handy to other concerns as well. We are speaking about rent-seeking behavior and the soft-budget constraint.

Rent-seeking was notionally introduced by Tullock (1967), but the term as such was firstly coined by Krueger (1974). It primarily conveys the idea of rational and self-seeking behavior that redistributes resources available to society. Tullock, on the one hand, highlighted that lobbies are encouraged to effect wealth transfers by means of the government in a negative sum game as economic agents invest resources to profit from those transfers or forestall them from taking place. On the other hand, he laid stress on the fact that rent-seeking behavior has double costs: the distortionary effect of the rent itself, and the diversion of productive resources towards competition for the prize of the rent. (Tullock, 1990 and also Tullock, Seldon and Brady, 2002)

The Soft-Budget constraint refers to the following environment: an unprofitable and failing company is bailed out either by the government or the company’s creditors, regardless whether it is a company in the private or the public sector of the economy. In other words, instead of keeping a tight budget, managers can soften the underlying constraints because additional cash flows are likely to come out of the government or creditors’ pockets, discouraging therefore a culture of financial discipline. This issue was firstly advanced by Kornai (1979) in the context of socialist economies, and then it was extended to capitalist economies (an updating can be found in Maskin, 1999). Against the background of privatizations, Tornell (1999) applied this tool of analysis to banks with low capitalization and implicit government guarantees, private mafias and non-transparent bankruptcies procedures.

Financial Economics and Corporate Finance seem to provide us with another promising research domain for both concepts although it comes as a surprise that they have not been handled together so far. There has been some research, however, limited in scope to rent-seeking only. In this sense, Edlen and Stiglitz (1995) should be marked as one of the earliest efforts to study rent seeking in corporate finance, and Bebchuck, Fried and Walker (2002) one of the latest, with an extensive research on executives compensation plans.

This paper intends to map out a linkage between rent-seeking and the soft-budget constraint in corporate life, by means of a fitting incremental cash flow approach. Such a task will be carried out, for the sake of argument, through the following stages:
In section 1, rent-seeking will be applied to for-profit organizations, taking advantage of the incremental cash flow model. Next, a brief outline on the concept of economic rent will follow so as to put the whole picture into a suitable framework.

Afterwards, we deal with internal separation portfolios and the management pay package, two sources of rent-seeking behavior that will deserve a closer look in sections 2.1 and 2.2 before proceeding, as it will be done in section 2.3, to work out how conflicts of interest might be translated by rent-seeking behavior.

It is for section 3 to reframe the incremental cash flow model so as to make it suitable for the analysis of the corporate soft-budget constraint. And in section 3.1 we inquire into the connection between corporate rent-seeking and the corporate soft-budget constraint. Conclusions will come after.

Last of all, an Appendix is attached, whose contents would have been felt cumbersome if they had been embedded in the text, but they certainly could add information and details for an in-depth reading of the paper.

1.- CORPORATE RENT SEEKING

If we look at cash flows from the point of view of modern Corporate Finance, they will tell the story about the manifold ways they may be apportioned on behalf of the company’s value enhancement and the advantage of its stakeholders. The standard cash flow model (SCFM) predicates that changes in cash flows from assets are to be distributed towards creditors and stockholders along a conventional period \([t; t+1]\):

$$\Delta CF_t \text{(assets)} = \Delta CF_t \text{(creditors)} + \Delta CF_t \text{(stockholders)}$$

In other words, (1) brings forward that debt holders and stockholders have cash flow rights on the residual income of any company. More background on the SCFM is to be found in the Appendix.

Remark

Working out (1) on an ex-ante basis is the current procedure in Corporate Finance and most of the time the expectations operator should be borne in mind, and hence (1) becomes

$$E[\Delta CF_t \text{(assets)}] = E[\Delta CF_t \text{(creditors)}] + E[\Delta CF_t \text{(stockholders)}]$$

contingent upon the economic agent’s information set \(\Omega_t\) of available information up to date “t”. For ease of notation, we are going to drop the operator symbol and the underlying set \(\Omega_t\). More background on information sets can be found in Apreda (2001a).
But real life and current academic research do not lend credence to this story without further qualifications, and that is why Corporate Governance is a thriving field of knowledge and practice, with the purpose of analyzing malfeasances in the cash flow management, providing with organization design and codes of behavior to take due care of stakeholders’ interests. [Demirag (1998) offers international background to compare different styles of governance]

In this paper we are concerned with economic units (for instance, any for-profit company) within which individual actors (mainly managers or stockholders groups) play opportunistically to extract rents to their own benefit from the running cash flows of their company with loss or damage to other stakeholders. As a point of departure, we look for a broader meaning to be attached to private rent-seeking so as to distinguish it from rent-seeking in the public sector:

By Corporate Rent-Seeking is meant any sort of consistent and purposeful behavior with guile to the advantage of managers or stockholders groups with the following central features

- knowing that there are economic rents to grab, they compete for them;
- they appropriate more cash flows from the company than can be fairly claimed;
- or redistribute cash flows, damaging other stakeholders in their rights to those cash flows;
- in doing so, they prevent the company from achieving sustainable growth and value enhancement.

Remark

“Corporate Rent-Seeking” is an expression that can lead to confusion because it seems to focus on corporations only. We follow the mainstream convention here, by which organizations not incorporated, mostly small and medium companies, and other organizations producing goods and services, can be dealt within the narrowing term “corporate” we attach to any financial subject. A more descriptive and encompassing label would be “rent-seeking in the private sector”.

It’s worth trying to delve into the notion of rent before expanding on our subject, because it will provide the matter of rent-seeking not only with semantic consistency, but also stronger economic grounds.

Ownership of an economic resource (from land to companies, licenses and patents to personal skills, monopoly grants to copyrights) allows for reward, most of the time under the shape of a stream of payments.
Sometimes, however, we can find a differential component of the payment owed to an economic resource, springing from two sources:

a) there is a certain surplus economic return (or pure profit) that comes out of the ownership;

b) it is a surplus over those returns actually needed to retain the economic resource in its expected use.

Such a differential component is called *economic rent* and repays the ability to control access to a resource or the skill to enforce its ownership, rather than any actual expenditure, effort, or past actions sunk into the resource.

In general, this economic rent is assimilated to an excedent earned or collected over the amount measured by the economic cost of providing the good or service.

Sorensen (1996), in an insightful sociological approach to rents, put the whole issue under the following viewpoint:

> Rent is an advantage or surplus created by nature or social structure over a certain period of time. The creation of such advantages I shall call *rent-creation*. The pursuit of them, once they are in existence, is *rent-seeking*.

In other words, the concept of rent points to the idea of advantages that are unearned, while rent-seeking refers to any form of behavior designed to redistribute in one’s favor the rents associated with particular assets or enterprises. We have to bear in mind that rent-seeking directly implies that economic agents may compete and try to grab the rent-production of another economic agent or organization. Following this line of analysis, the Public Choice approach to rent-seeking highlights how interest groups seek legislation or other political acts that redistribute income and assets in their favor (Tullock, 1993). Moreover, rent-seeking is regarded in the Public Choice and political debate as manipulation of collective action for private benefit. In consequence, the efforts and investments of the rent-seekers that fail in securing those rents are wasted eventually, not being apportioned to any alternative resource production.

How these rents are to be distributed in any going concern is at the root of many conflicts of interest among the main stakeholders, namely stockholders, managers and creditors, since they compete to grab the advantages, regardless of whether they qualify or not for making such pretence.

We finish this section with the caveat that the contest for cash flows in any company, when following the book, is primarily a profit-seeking job. By far, equaling profit-seeking with rent-seeking seems utterly misplacing. From the definition above, rent-seeking hinges on opportunistic behavior with guile, which trespasses property-rights boundaries claimed by other stakeholders and, sooner
or later, it brings out losers among them, even to the extent of failing the company in the course of time (Baumol, 1990). On the other hand, profit-seeking is a driver of business activity within the law. Good corporate governance attempts to set up rules and constraints so as to curb rent-seeking and foster profit-seeking.

2. INCREMENTAL CASH FLOWS AND RENT-SEEKING

So far, most of the research on conflicts of interest has been carried out on agency problems among stockholders, creditors and managers. However, to get a functional picture of how the real players deal with actual cash flows in the rent-seeking game, we have to reshape (1) and uncover some distinctive cash flows that are embedded into those produced by assets.

Therefore, we bring forward an expansion of the SCFM by highlighting not only those cash flows to be addressed to creditors and stockholders, but also those claimed by managers as their pay package. Heed will also be given to the source of liquidity and wealth-holding behind what we are going to call the *internal separation portfolio*.

\[ \Delta CF_t (\text{assets; net}) = \Delta CF_t (\text{creditors}) + \Delta CF_t (\text{stockholders}) + \Delta CF_t (\text{internal separation portfolio}) + \Delta CF_t (\text{management pay package}) \]

(2)

Incremental cash flows from assets are labeled “net” because we shift some cash flows from the left side of (1) onto the right side of (2) by setting up two new cash flows categories: the “internal separation portfolio” and the “management pay package”, whose inner structure will be developed in section 1.1 and 1.2, respectively.

There are other meaningful cash flows that could be drawn out of assets, but the ones chosen seem unavoidable for the time being. Later in section 3, when addressing the managerial soft-budget constraint, we are going to benefit from other ways of splitting the cash flows conveyed by (1).

In particular, for countries where unions wield real power over cash flows to employees and workers the analysis should take them into account eventually as seekers of economic rents. The same could be predicated on the government, when taxes do take a big slice of the cash flows and fiscal policy become predatory on companies’ revenues. On this issue, we refer to section 2.3.
2.1.- THE INTERNAL SEPARATION PORTFOLIO

If we break up the left-side of the standard cash flow model in (1), three main components come to light (details in the Appendix 1):

\[ \Delta CF_{t} (assets) = \Delta CF_{t} (operations) - \Delta CF_{t} (provisions for working capital) - \Delta CF_{t} (provisions for long-term assets) \]

over which discretionary appropriation might be successfully accomplished. For instance, the so called cash assets and the long-term investment in financial assets, the former coming out of cash flows from working capital and the latter as cash flows from long-term assets. They can be regarded like components of a portfolio that consists of free-risk assets (Treasury Bills, for instance) in a proportion \( x_{F} \), and risky assets (either stock and bonds issued by private for-profit organizations, or bonds issued by governments) in a proportion \( x_{R} \). We are going to call this portfolio the internal separation portfolio held by the company:

\[ S = < x_{F}, x_{R} > \quad \text{subject to} \quad x_{F} + x_{R} = 1 \]

Remark

In the strict sense of the expression, a “separation portfolio” consists of a risk-free asset and the market portfolio. As long as the portfolio \( S \) is well diversified, it will track down on to the market portfolio, or some proxy of it, eventually. Background on plain and enlarged separation portfolios is to be found in Apreda (2003b). An alternative expression to internal separation portfolio could be internal mutual fund.

It’s worth focusing on cash assets and long-term investment in financial assets so that the meaning of the internal separation portfolio may become operational.

a) Cash Assets

To underline the importance of cash assets, it will be shown where they come from and how we can take them apart from the left side of (1).

The following equation exhibits the main current assets components (for ease of notation, we are going to drop “CF” before cash flows subcomponents):

\[ \Delta CF_{t} (current assets) = \Delta t (cash) + \Delta t (financial short-term investments) + \Delta t (inventories) + \Delta t (accounts receivable) + \Delta t (other current items) \]

The expected cash flows from cash, \( \Delta t (cash) \), can be split down into two components:
- cash that is required for the daily running of a business, $\Delta t \ (cash \ for \ operations)$, which should be included for the provision of working capital along the budgeted period.

- cash that is not required for normal operations in the budgeted period, $\Delta t \ (cash \ not-for-operations)$, which performs as a stock of excess liquidity.

Furthermore, $\Delta t \ (financial \ short-term \ investments)$ should not be regarded, as in current textbook presentations of the cash flow standard model, like a depleted item. On the contrary, this is the place where many companies ought to set up and manage financial assets portfolios with a short-term target.

Therefore, and as from now, “cash assets” will stand for

\begin{equation}
\Delta t \ (cash \ assets) = \Delta t \ (cash \ not-for-operations) + \\
+ \Delta t \ (financial \ short-term \ investments)
\end{equation}

On the other hand, non-cash assets consist of changes in inventories, accounts receivable and other current assets. In this way,

\begin{equation}
\Delta t \ (current \ assets) = \Delta t \ (cash \ assets) + \\
+ \Delta t \ (cash \ for \ operations) + \Delta t \ (non-cash \ assets)
\end{equation}

which sets apart the actual amount that should be allocated to current assets when we strip from them the cash assets:

\begin{equation}
\Delta CF_t \ (current \ assets; \ net) = \Delta t \ (cash \ for \ operations) + \Delta t \ (non-cash \ assets)
\end{equation}

In this way, provisions to working capital become

\begin{equation}
\Delta CF_t \ (provisions \ for \ working \ capital; \ net) = \\
\Delta CF_t \ (current \ assets; \ net) - \Delta CF_t \ (current \ liabilities)
\end{equation}

Unless we assumed cash assets would amount to zero, changes in working capital ought to be assessed by means of relation (4). Otherwise, we would be mixing up actual cash flows with items that do not convey outflows by themselves.

**b) Long-term Investment in Financial Assets**

Following the same logic as in the case of cash assets, we claim that the SCFM does not take into account the item $\Delta t \ (financial \ long-term \ investments)$ either. It’s rather surprising, because such item stands for the underlying financial
assets that any company actually manages as a portfolio whose cash flows are not necessarily outflows in the period. Customarily, in the standard incremental cash flow model this item is supposed to be null and not influencing the expected changes in cash flows apportioned to non-current assets. Therefore, a sensible way of splitting the cash flows related to long-term assets would be the following:

$$\Delta CF_t \text{ (provisions for long-term assets)} =$$

$$\Delta t \text{ (provisions for long-term assets; net)} + \Delta t \text{ (financial long-term investments)}$$

**c) The Internal Separation Portfolio**

Now, we have to delve into the structure of the *internal separation portfolio*, that comes defined as

$$S = \{ \text{ cash assets } ; \text{ financial long-term investments } \}$$

The structure of this portfolio, viewed from the proportions of incremental wealth to be allocated at date “$t$” amounts to:

$$S = < x \text{ (cash assets) } ; x \text{ (financial long-term investments) } >$$

such that

$$x \text{ (cash assets) } + x \text{ (financial long-term investments) } = 1$$

Finally, the translation of this portfolio into incremental cash flows is conveyed by

$$\Delta CF_t \text{ (internal separation portfolio)} =$$

$$\Delta t \text{ (cash assets) } + \Delta t \text{ (financial long-term investments)}$$

It should be noted that any company manages a portfolio of financial assets to trade off risk and return along a holding period. In fact, it performs as a separation portfolio consisting of risk-free assets and risky assets, as well. Hence, and recalling (3):

$$\Delta CF_t \text{ (internal separation portfolio)} = \Delta t \text{ (cash not for operations)} +$$

$$+ \Delta t \text{ (financial short-term investments)} +$$

$$+ \Delta t \text{ (financial long-term investments)}$$
Besides, in the planning horizon \([ t ; t + 1 ]\), this portfolio really amounts to the main source of future investment or expenditure decisions that are put it off for the time being.

**Remark**

*In going from the standard cash flow model in (1) to the expanded one in (2)*

\[
\Delta CF_t (assets; net) = \Delta CF_t (creditors) + \Delta CF_t (stockholders) + \Delta CF_t (internal separation portfolio) + \Delta CF_t (management pay package)
\]

we have netted down to cash flows from assets

\[
\Delta CF_t (assets) = \Delta CF_t (operations) - \Delta CF_t (provisions for working capital) - \Delta CF_t (provisions for long-term assets)
\]

substituting firstly \(\Delta CF_t (provisions for working capital; net)\) for \(\Delta CF_t (provisions for working capital)\) sending at the same time the cash assets to the internal separation portfolio; and secondly, substituting \(\Delta CF_t (provisions for long-term assets; net)\) for \(\Delta CF_t (provisions for long-term assets)\) with long-term investments being also sent to the separation portfolio.

### 2.2. **THE MANAGEMENT PAY PACKAGE**

Whereas this compact of fixed, variable and contingent payments has been widely analyzed since the influential paper of Murphy (1998) laid ground on the subject, the discussion has neglected incremental cash flows so far. As the Enron’s disgraceful affair brought to light, the management pay package is not a matter to be left on the side (Apreda, 2002a).

In the same fashion as we did with the separation portfolio, we have to uncover distinctive components of the management pay package. It must be kept in mind, however, that the following factoring of components into the pay package is not the only one available, but rather a functional categorization for this paper’s purposes.

\[
\Delta CF_t (management pay package) = \Delta t (salary in cash) + \Delta t (fringe benefits) + \Delta t (corporate expenses account) + \Delta t (performance bonus) + \Delta t (deferred income) + \Delta t (deferral payments) + \Delta t (long term incentives) + \Delta t (loan advances) + \Delta t (exercised stock options) + \Delta t (directors’ fees and incentives)
\]
Remarks

Many items in (7) are, in fact, ex-ante cash flow designs not only to reward but also to elicit effort, loyalty and commitment from managers (and from the Board of Directors, as well);

\( \Delta t \) (long term incentives) is an item that involves financial engineering products like stock options, phantom stock, convertible bonds, preferred convertible stock, stock appreciation rights, and restricted stock (Jensen and Smith, 1985).

2.3.- CONFLICTS OF INTEREST AND RENT-SEEKING

To gain knowledge about the rent-seeking nature of incremental cash flows, the standard model should be enlarged on as shown below in relationship (8). In this way,

- actual sources of incremental funds will remain in the left-side hand;
- in the right-side hand care will be given, firstly, to cash flows commitments to a wider range of stakeholders, including government and unions;
- and secondly, the separation portfolio and the managers’ pay package will be highlighted as an application of resources that become instrumental when tracking down on rent-seeking behavior.

\[
\Delta CF_t \text{ (from assets; net)} + \Delta CF_t \text{ (net new financing)} = \\
\Delta CF_t \text{ (creditors)} + \Delta CF_t \text{ (stockholders)} + \\
\Delta CF_t \text{ (internal separation portfolio)} + \Delta CF_t \text{ (management pay package)} + \\
\Delta CF_t \text{ (government)} + \Delta CF_t \text{ (trade unions / workers)}
\]

When we go from the SCFM to the expansion displayed in (8), not only some items are brought into light from the cash flows from assets, but also the incremental cash flows addressed to stockholders and debt holders undergo major changes. Let us give heed to this matter.

a) To begin with, we will keep under the label “cash flows to stockholders”, \( \Delta CF_t \text{ (stockholders)} \), only the actual cash flows they are entitled to receive as residual rights

\[
\Delta CF_t \text{ (stockholders)} = \text{ dividends} ,
\]

while the remaining items usually addressed to stockholders in the SCFM will be allocated to net new stock,
\[ \Delta CF_t \text{ (net new stock)} = \text{new stock issues}_t - \text{stock repurchase}_t \]

The standard cash flow model bundles dividends and net new stock together, but this practice seems not functional, at least for two reasons:

- one thing is to send forth dividends to actual stockholders,
- but quite another one is to make decisions about repurchasing or to issue new stock.

b) By cash flows to bondholders we mean only the actual contractual cash flows they are entitled to:

\[ \Delta CF_t \text{ (debtholders)} = \text{interest}_t + \text{debt repayment}_t \]

while the remaining items that the SCFM embedded in the cash flows to debtholders will be allocated to,

\[ \Delta CF_t \text{ (net new debt)} = \text{new debt issues}_t - \text{debt repurchase}_t \]

c) Finally, cash flows from net new financing come defined as

\[ \Delta CF_t \text{ (net new financing)} = \Delta CF_t \text{ (net new debt)} + \Delta CF_t \text{ (net new stock)} \]

Analyzing cash flows from this point of view seems particularly useful since uncovers distinctive sources of cleavages among competing stakeholders.

Let us assume that an economic predator in pursuit of these cash flows consistently enacts a deliberate scheme for grabbing cash flows in (8) that should be apportioned to other incumbents or be kept to fulfill the company own needs. This behavior amounts to corporate rent-seeking, by setting up a measurable economic rent with a monopolistic reach over cash flows that becomes functional as time passes by to their own interest while, on the other hand, this activity goes in detriment of other stakeholders’ cash flows rights, or against the company’s goals.

We are going to see below that unions, management, government, creditors, stockholders, are all of them likely to become predatory actors to the damage of either the company or remaining parties (Grossman and Kim, 1997, bring forth a model on predatory behavior).

**Remark**

*Latest research points to the voluntary consent of stakeholders and regards the firm as an ongoing multilateral agreement based on voluntary consent. Furthermore, it is usually expected from managers to try and keep the joint interests in balance within such framework [for a libertarian approach to some stakeholders’ issues see Freeman and Phillips (2001) ].*
Based on (8), we can single out each component and get access to the linkage between conflicts of interest and rent-seeking behavior.

- \( \Delta CF_t (\text{from assets; net}) \)

Recalling the inner structure of these cash flows

\[
\Delta CF_t (\text{from assets; net}) = \Delta_t (\text{operations}) - \Delta_t (\text{provisions for working capital; net}) - \Delta_t (\text{provisions for long-term assets; net})
\]

we have to make a clear distinction between the cash flows from operations from the remaining ones. The former is measured from the profit and losses statement and conveys little appeal for rent-seekers from an ex-ante perspective, if it were not the case for creative accounting [an insightful contribution to the topic in Kane (2003)].

Cash flows intended to make provisions on working capital and long-term assets, however, can bolster attempts to hide cash flows and carry out the rent extraction (more on this incremental cash flow in section 3.1 that will deal with the relationship between rent-seeking and the managerial soft-budget constraint).

Managers can appropriate rents in the company they work for, by means of informal (unwritten) contracts ruling their interrelation so that they can pursue their rent-seeking targets by cooperating among them to contrive the cash flows from assets. To lessen this agency problem, Faith et al. (1984) proposed outside hiring as a tool for preventing or lessen this behavior.

- \( \Delta CF_t (\text{net new financing}) \)

As we see in the former section when relationship (8) was analyzed in depth, this item involves net new stock and net new debt:

\[
\Delta CF_t (\text{net new financing}) = \Delta_t (\text{net new debt}) + \Delta_t (\text{net new stock})
\]

It seems a rather neglected issue in corporate governance how the new funding is actually used. In fact, before the appropriation of money for the expected investment decisions obtains is due, the Treasurer has a lot of latitude to shift cash flows to other purposes.

For the last twenty years, the knowledge that new financing was there up for grabs has fostered greater awareness in the public mind and the policymakers’ agendas about the need of shaping up corporate governance and judiciary practice. Not surprisingly, hard covenants embedded at new issues of bonds and shares have become mandatory in most capital markets [on this matter, a good starting point is Smith and Warner (1979)].
- ▪ \( \Delta CF_t \) (creditors)

This item seems worthy of being noticed, to the extent that Williamson (1996) claimed that “rather than regard debt and equity as financial instruments, they are better regarded as different governance structures”. Therefore, either on private or public placements, a complex array of covenants works on the safe side of lenders to forestall rent-seeking.

However, cash flows to creditors under the guise of convertible preferred stock (that performs as a bond till conversion obtains) could keep out of sight rent extraction favoring venture capital or private equity investors, or still worse, entrenched managers eventually. The same may be predicated about convertible bonds and bonds embedded with warrants.

- ▪ \( \Delta CF_t \) (stockholders)

This item hosts manifold devices that are successfully employed in concealing rent-seeking endeavors in emergent countries [Khana and Palepu, 1999], from differential stock classes to give an upper hand to family owned companies, to tunneling among branches from the same holding (Johnson et al., 2000) and expropriation of dividends (Faccio et al., 2001).

- ▪ \( \Delta CF_t \) (internal separation portfolio)

The separation portfolio fulfils some noteworthy purposes in any company:

a) it is a liquidity supplier, because it consists of cash and tradable financial assets that can be sold to meet any liquidity constraint;
b) it performs as an actual portfolio that provides with return-risk profiles to the company;
c) it hedges commitments and disbursements the firm might face in the future, mainly through zero-coupon bonds issued by governments and private corporations.

But, at the same time, the separation portfolio is also to be regarded as a source of likely agency problems and governance malfeasances:

i. it can conceal free cash flows to be used later on at discretion of the management’s agenda [this is related with free cash flows (Jensen, 1986) and more on this issue will be found in section 3.2]; ii. it may convey a strategy of oncoming mergers or acquisitions without fair disclosure of the actual goals to shareholders or creditors;

iii. it certainly enables the Treasury Department to take advantage of the portfolio to contract risky endeavors and financial derivatives, submitting assets as collaterals;
iv. it can shield the selling of assets to repurchase the company’s own securities to favor incentive designs or performance bonus plans in favor of high tiers of its management.

- \( \Delta CF_1 \) (management pay package)

In a rent-seeking environment, managers are able to extract rents from their firms by means of cash flows to provide them with extraordinary payments and perquisites:

a) new issues of stock and bonds designed to provide incentives and rewards, could be granted with provisions that trigger off discretionary cash flows against other stakeholders’ interests, mainly with hybrids like convertible bonds, convertible preferred stock, or even with ordinary stock options plans [background on this issue in Hall and Murphy, 2003];

b) transient investments allocated in the internal separation portfolio, as mentioned above, could cover up future incentives in disguise.

Recently, Bebchuk, Fried and Walter (2002) gave heed to what they called the managerial power approach, that focuses on the role of managerial power in shaping executive compensation practices, bringing about rents from the gap between optimal contracting and actual compensation. Furthermore, they wondered whether a compensation arrangement that is favorable to executives but suboptimal for shareholders should be finally adopted, and stated that this will depend on how the arrangement is perceived by outsiders and, in particular, on how much outrage if any it is expected to produce.

The potential significance of outrage costs explains the importance of camouflage, yet another building block of the managerial power approach. Because outrage resulting from outsiders’ recognition of the presence of rent extraction provides a possible check on manager’s power to extract rent, managers have an incentive to obscure and legitimize or, more generally, to camouflage, their extraction of rents. (Indeed, they argued that the extensive use of compensation consultants, which might be regarded as an attempt to optimize incentives, can itself be seen as a means of justifying payments.)

- \( \Delta CF_1 \) (government)

As time passes by, it comes to light that companies are involved with the government in manifold ways. It seems sensible to split up the incremental cash flows directed to government in three main components:

\[
\Delta CF_1 (government) = \Delta_t (taxes) + \Delta_t (government \ rent-seeking) + \Delta_t (corruption)
\]
On the right side, the first incremental cash flow encompasses all payments the company makes to support any government and its services, wherever the company runs its operations. These payments are within the law, mainly related to taxes, tariffs and other excises.

Cash flows linked with rent-seeking from government institutions have become an issue of great concern, mainly voiced by followers of the Public Choice Approach. Rent-seekers try to influence the state to their own benefit (Berry, 1997). But, on the other hand, the same can be predicated on the state as a rent-seeker, when diversifies the tax base, raising its tax revenues as a result of the advantages of portfolio diversification and fiscal illusion on the side of taxpayers (Conybeare, 1982). It is not only taxes but lobbying costs, because public investment conveys rent-seeking to the extent of securing personal wealth or political support to officials, politicians and legislators as well. On this regard, Gupta and Swenson (2001) provide background on rent-seeking agents lobbying tax exemptions and giving money to Political Action Committees, benefiting themselves on behalf of their bonus, stock options plans and related perquisites.

Lastly, cash flows dealing with corruption seem to become meaningful and distinctive the more the company involves itself with countries where crony capitalism is enduring and the judiciary system lacks efficacious law enforcement procedures (Kang, 2002).

Corruption is defined as the abuse of public office for private gains. The World Bank distinguishes grand corruption from patronage and petty corruption. In the former category we find private payments to public officials so as to influence the content of the basic rules of the game (legislation, rules, laws or decrees). Therefore, key state institutions can be captured by private interests to skew the policy-making process on behalf of companies that purchase legislation and influence either at central banks or the state owned financial institutions. [Hellman et al. 2000; also Keefer and Knock, 2002]. In the latter category, by patronage and petty corruption is meant the costs incurred by individuals and companies in their direct dealing with the state.

As Kettl (2000) highlighted, the high cost of gathering information about policies strengthens the power of special interest groups, and increases the chance that these interests will capture the attention of decisionmakers.

- \( \Delta CF_1 (\text{trade unions / workers}) \)

Labor may be an important claimant to incremental cash flows coming out of assets. As far as some market settings nurture unexpected economic rents, unions are ready to make a grab for the windfall. Examples of such friendly environments can be found whenever cutting-edge innovations, steadfast value enhancement, protectionism or monopolistic behavior foster new incremental cash flows.
Regulations and protectionism create rents over which workers and unions are able to negotiate. Labor unions are rent-seeking organizations claiming firms’ monopoly rents. An interesting case about labor rent sharing was introduced by Rose (1987) on the evidence stemming from the trucking industry. Labor achieves gains by appropriating rents that would otherwise accrued to shareholders, managers, retained earnings or new investment opportunities.

3.- THE MANAGERIAL SOFT BUDGET CONSTRAINT

Writing against the background of socialist countries, Kornai (1979) defined a budget constraint as *hard* when is exerted with strong discipline: the firm can spend only as much money as it has, and credit is only available on the grounds of orthodox and conservative banking procedures. The budget constraint is *soft* whenever the state and even the company’s creditors (in capitalist settings) help the firm out of trouble. The state helps firms to soften their budget constraints whenever it confers subsidies, tax exemptions, hidden price increases, credit on lenient terms, even to the extent of nationalizing failing private companies or concessionaires. It does not come as a surprise, as Kornai put it, that whenever soft-budget constraint is a current practice,

*the state is a universal insurance company which compensates the damaged sooner or later for every loss.*

Hence, the usual meaning attached to “soft-budget constraint” has sprung from the Economics of the public sector. However, in order to apply it sensibly to corporate governance issues, we must narrow it down to make it suitable for the Economics of the private sector.

We are going to understand by *Managerial Soft-Budget Constraint* any systematic, on-purpose behavior with guile whose core features are:

- Budget constraints and their underlying incremental cash-flows statements become merely declarative.
- Cash-flows are opportunistically shifted from declarative targets and allocations towards rent-seeking targets and allocations.
- Growth and value enhancement are not tied to the current and future financial situation
- Failures or malfeasances arising from the former procedures are met by a corporate bail-out process following a set of consecutive stages:
  - the buck stops below the bottom line;
in case of financial trouble, creditors and governments are asked to foot the bill and keep the company running;
- when things turns for the worst, creditors and governments are asked to take over the disposals.

Hence, any budget constraint adds up to an ex-ante pattern of behavior that influences not only the firm’s decisions and performance, but also managers’ expectations and personal agendas.

In this section, we are going to develop a framework that enlarges the SCFM so as to deal with the soft-budget constraint issue.

Recalling the modified incremental cash flow model (8), we want to shape it so as to get a perspective from within the company as a required step before dealing with the soft-budget constraint sources. Therefore, we take away from (8) any cash flows directed to government and unions which are shifted back to their original location within the cash flows from assets as in (1) or (2). The remaining incremental cash flows will fit in with the purpose of our analysis:

\[
\Delta CF_t(assets; net) + \Delta CF_t(new \ financing) = \\
= \Delta CF_t(creditors) + \Delta CF_t(stockholders) \\
+ \Delta CF_t(internal \ separation \ portfolio) + \Delta CF_t(managers \ pay \ package)
\]

so that the left side of (9) brings forth how resources are provided not only by \(\Delta CF_t(assets; net)\) but also by new financing,

If we now rearrange the transient cash flows hoarded in the internal separation portfolio, a fairly informative split follows:

\[
\Delta CF_t(internal \ separation \ portfolio) = \\
= \Delta CF_t(investment \ fund \ portfolio) + \Delta CF_t(new \ growth \ opportunities)
\]

That is to say, the internal separation portfolio consists of two main components:

a) cash assets and long-term securities issued by governments or firms, which amount to a regular investment portfolio managed within the company’s Treasury;
b) cash assets and long-term securities earmarked for new investment opportunities in real assets.

Such is the intuition behind (10). In other words, the internal separation portfolio performs as the company’s investment fund, and also as a portfolio of financial assets to cope with real-options embedded in new growth opportunities.

Therefore, so as to give account of the actual sources related to soft budget constraints, the incremental cash flow model should be shaped eventually as

\[
\Delta CF_t (assets; net) + \Delta CF_t (new financing) =
\]

\[
= \Delta CF_t (creditors) + \Delta CF_t (stockholders) + \Delta CF_t (managers pay package) +
\]

\[
+ \Delta CF_t (investment fund portfolio) + \Delta CF_t (new growth opportunities)
\]

3.1.- RENT-SEEKING AND THE MANAGERIAL SOFT-BUDGET CONSTRAINT

It is useful to contrast corporate rent-seeking with the managerial soft-budget constraint. In the first place, let us give thought to a core similarity, to go on with some differences afterwards.

a) The basic likeness lies on both being examples of consistent opportunistic behavior followed by some parties in the company, to the disadvantage of other counterparts. The former profit from the fact that the latter face asymmetric information, bounded rationality and transaction costs as their restraints to handle monitoring successfully.

b) The first difference is to be found in how distinctive each behavior becomes. Whereas rent-seeking can be pursued from operational, tactical or strategical perspectives, the soft-budget constraint hinges on a mood of leniency on cash flow management that could become functional to rent-seeking. However, seeing the soft-budget constraint as a particular case of rent-seeking would be misleading, because soft-budget constraint may also be found in many organizations that foster a culture of inefficiency, mediocrity, sheer waste, or managerial mindlessness.

c) The second difference that matters lies in the way we can track down the ultimate players. As we saw in 2.3, rent-seeking is a game with many participants that hold a stake in the company. Instead, the soft-budget constraint is carried out by the management, most of the time.
Relationship (8) teaches how the main players’ actions could be mirrored by means of incremental cash flows. Pervasive and widespread conflicts of interest seems the distinctive feature that (8) conveys in the end.

On the other hand, (11) displays a narrower stage, because broad conflicts of interest are restricted here to agency problems among the main stakeholders in any company, namely the stockholders, debt holders and managers.

d) Although stockholders and debt holders can be influential in dealing with budget leniency, it is for managers to become instrumental in engineering cash flows transfers so as to profit from the soft-budget constraint. In this regard, however, a striking difference arises when we contrast how this behavior evolves in both the public and the private sector. In fact, three variants on the soft-budget constraint behavior are worthy of being noticed.

In state-owned companies or in government agencies, any time the public servant in charge expends and invests beyond the budget constraint, he does not feel obliged to meet neither efficiency nor efficacy targets, since he is aware that leniency goes hand in hand with lack of accountability enforcement (Whincopp, 2000).

In private companies running their business within a soft-budget constraint environment fostered and nurtured by the government (like in many emergent countries, being Argentina a good case in point), private managers follow the same behavior that public servants, oblivious of competitive thrust, innovation, even accountability to their stakeholders. The bottom line is disregarded, because in these countries capitalism tenets and law enforcement are neglected to the extent that losers are rewarded and winners punished. Instead of economic freedom, politics intrudes in markets to lead business into a path of corruption and malfeasance.

But there is a third variant, which is the most important to our goals in this paper, and it comes under the label of “Managerial Soft-Budget Constraint”, where the management perform as in the paragraphs above, but the motivation does not come from the government or the political system, but from personal and hidden agendas. The practice of the corporate soft-budget constraint can be found in developed, emergent or transient economies alike. Enron seems a disgraceful case in point.

3.2.- FOLLOWING UP THE MANAGERIAL SOFT-BUDGET CONSTRAINT

The managerial soft-budget constraint can be tracked down by means of (11) either from the sources of funds, or their allocation.


**a) From the sources of funds**

As we briefed in section 2.3, when dealing with cash flows from assets

\[ \Delta CF_t \text{ (from assets; net)} = \Delta t \text{ (operations)} - \]

\[ - \Delta t \text{ (provisions for working capital; net)} - \Delta t \text{ (provisions for long-term assets; net)} \]

the last two items in the right-hand side host plenty of chances to rent-seeking behavior. The negative sign before each of those cash flows means that they are outflow provisions, that is to say, uses of funds (unless, of course, that incremental cash flows carried negative signs by their own).

These provisions for working capital (for instance, credit enhancement from suppliers and to customers, short-term financing, inventories turnover) and long-term assets (storage, maintenance, renewal) provide the management with transient funds to be depleted later in unrelated purposes. Hence, the fulfillment of the goals embedded in those provisions may be impaired to the extent of leading the company towards financial distress.

On the other hand, (11) also highlights cash flows from new financing, within which there is a wide range of patterns for practicing predatory investments and the soft-budget constraint game. For a start, unaccountable repurchase of bonds that favor some bank or parental company. Also, repurchase of stock deliverable to managers through stock options arrangements.

However, the most questionable issue regarding these cash flows can be found in the increasing indebtedness of the company with state-owned banks under lenient credit requirements for interest and principal payments. It is very frequent in emergent countries that in those cases where private banks after due diligence refuse to grant any loan to the company, on the grounds of bad credit ratings, the company get access to funding in the public bank system because of political or populist qualifications. This goes hand in hand with bribes to bank officials, policymakers, influential lobbyists, and government officials. Although it is said that the Central Bank is the lender of last resort, the fact is that this sort of corruption practice conveyed by the soft-budget constraint culture imposes an undeserved levy on citizens’ welfare, through inflation, transaction costs, new taxes and loss of growth opportunities.

**b) From the uses of funds**

With the wisdom of hindsight, and taking advantage of many disgraceful affairs in the takeover’s wave along the 80s and 90s, or the example of malfeasance so suitable epitomized by Enron, it is not surprising that the main tools at the reach of managers’ hands in playing the budget leniency culture are located in the following components of the left-hand side of relation (11):
\[ \Delta CF_t (managers \ pay \ package) + \]

\[ + \ \Delta CF_t (investment \ fund \ portfolio) + \Delta CF_t (new \ growth \ opportunities) \]

As we expanded on elsewhere (Apreda, 2003c) there are many transient items in the incremental cash flow model as displayed by (11). They are transient because they are ex-ante and proper allocation will take place as the planning horizon \([t: t + 1]\) evolves. But they are also transient because managers will pursue opportunistic behavior, seeking for rents, or practicing how to make budget constraints soft.

If we recall that cash flows from assets encompassed two negative cash flows attached to working capital and long-term assets, we can get the whole picture of the discretionary use of funds on the side of the management:

\[ (12) \]

\[ \Delta t (provisions \ for \ working \ capital; \ net) + \Delta t (provisions \ for \ long-term \ assets; \ net) + \]

\[ + \ \Delta t (managers \ pay \ package) + \ \Delta t (investment \ fund \ portfolio) + \]

\[ + \ \Delta t (new \ growth \ opportunities) \]

This relationship is fairly comprehensive in telling most of the story about the managerial soft-budget constraint.

Finally, (12) also quantifies the so-called Free Cash Flows, firstly described by Jensen (1986) as

"cash flow in excess of that required to fund all projects that have positive net present values when discounted at the relevant cost of capital. [...] The problem is how to motivate managers to disgorge the cash rather than investing it at below the cost of capital or wasting it on organization inefficiencies."

It is from (12) we can track down distinctive sources of free cash flows:

\[ \Delta t (free \ cash \ flows) = \Delta t (provisions \ for \ long-term \ assets; \ net) + \]

\[ + \ \Delta t (investment \ fund \ portfolio) + \Delta t (new \ growth \ opportunities) \]

CONCLUSIONS

This paper claims that corporate rent-seeking and the managerial soft-budget constraint are well-defined subjects to be embedded into the realm of Corporate Governance.
Corporate Rent-Seeking and Managerial Soft-Budget Constraint

Firstly, it provides the semantics for rent-seeking and soft-budget constraint when intended as topics to be developed in corporate governance learning and practice.

Secondly, a quantitative framework grounded on incremental cash flows is set forth so as to deal with the budgeting and the performance track of those cash flows from which there might be scope for attempting rent-seeking behavior and nurturing a soft-budget constraint culture.

Thirdly, it traces back to the sources of the deep relationship that arises from conflicts of interest with rent-seeking, and also the managerial soft-budget constraint with rent-seeking.

REFERENCES

Apreda, R. (2003a). The Semantics of Governance (The common thread running through corporate, public and global governance). University of Cema Working Paper Series, number 242, Buenos Aires, Argentina.

Apreda, R. (2003b). Simple and Enlarged Separation Portfolios (On their use when arbitraging and synthesizing securities). University of Cema Working Paper Series, number 233, Buenos Aires, Argentina.

Apreda, R. (2003c). The Governance Slack Model: A Cash Flow Approach to Shape Up Corporate Accountability and Good Practices. Corporate Ownership and Control, volume 1, number 1, forthcoming in September.

Apreda, R. (2002a). How Corporate Governance and Globalization can run Afool of the Law and Good Practices in Business: the Enron’s Disgraceful Affair. University of Cema Working Paper Series, number 225, Buenos Aires (downloadable from www.ssrn.org/).

Apreda, R. (2002b). Incremental Cash Flows, Information Sets and Conflicts of Interest. University of Cema Working Paper Series, number 220, Buenos Aires.

Apreda, R. (2001a) Differential Rates of Return and Residual Information Sets. New York University, Salomon Center, Working Paper Series S-01-3, New York.

Apreda, R. (2001b) A Cash Flow Model with Float to Deal with Corporate Governance Issues. New York University, Salomon Center, Working Paper Series S-01-4, New York.

Apreda, R. (2001c) Corporate Governance in Argentina: 1991-2000 (The Consequences of Economic Freedom). Corporate Governance: An International Review, volume 9, number 4, pp. 298-310.

Apreda, R. (1999). The Cash Float Model with Float: A New Approach to Deal with Valuation and Agency Problems. Journal of Applied Economics, volume 2, number 2, pp. 247-279.

Baumol, W. (1990). Entrepreneurship: Productive, Unproductive and Destructive. The Journal of Political Economy, volume 98, number 5, pp. 893-921.
Bebchuk, L.; Fried, J.; Walker, R. (2002). Managerial Power and Rent Extraction in the Design of Executive Compensation. Working Papers 9068, National Bureau of Economic Research (downloadable from www.nber.org).

Berry, J. (1997). The Interest Group Society. Addison-Wesley, New York.

Conybeare, J. (1982). The Rent-Seeking State and Revenue Diversification. World Politics, volume 35, number 1, pp. 25-42

Demirag, I. (Editor) (1998). Corporate Governance, Accountability, and Pressures to Perform: An International Study. Jai Press, Stamford, Connecticut.

Edlen, A. and Stiglitz, J. (1995). Discouraging Rivals: Managerial Rent-Seeking and Economic Inefficiency. American Economic Review, volume 8, number 5, pp. 1301-1312.

Faccio, M.; Lang, L. and Young, L. (2001). Dividends and Expropriation. The American Economic Review, volume 91, number 1, pp. 55-78.

Faith, R.; Higgins, R; and Tollison, R. (1984). Managerial Rents and Outside Recruitment in the Coasian Firm. The American Economic Review, volume 74, number 4, pp. 660-672.

Freeman, E. and Phillips, R. (2001). Stakeholder Theory: A Libertarian Defense. Darden Graduate School of Business, Working Paper 01-03, University of Virginia (downloadable from www.ssrn.org).

Grossman, H. and Kim, M. (1997). Predation, Efficiency and Inequalities. Working Papers 631, National Bureau of Economic Research (downloadable from www.nber.org).

Gupta, S. and Swenson, C. (2001). Rent-seeking by Agents of the Firm. Working paper (downloadable from www.ssrn.org).

Hall, B. and Murphy, K. (2003). The Trouble with Stock Options. Working Papers W9784, National Bureau of Economic Research (downloadable from www.nber.org).

Hawley, J. and Williams, A. (1997). The Emergence of Fiduciary Capitalism. Corporate Governance: An International Review, volume 5, number 4, pp. 206-213.

Hellman, J; Jones, G; Kauffman, D. and Schankeman, M. (2000). Measuring Governance, Corruption and State Capture. The World Bank, World Bank Institute.

Jensen, M. (1986). Agency Costs of Free Cash Flow, Corporate Finance and Takeovers. American Economic Review, volume, volume 76, pp. 323-329.

Jensen, M. and Smith, Clifford. (1985). Stockholder, Manager, and Creditor Interests: Applications of Agency Theory. [in Altman, E. and Subrahmanyam, M. Editors. Recent Advances in Corporate Finance, Dow-Jones Irwin, New York]

Johnson, S.; La Porta, R.; Lopez de Silanes, F.; Shleifer, A. (2000). Tunnelling. Working Paper W7523, National Bureau of Economic Research (downloadable from www.nber.org).

Kane, E. (2003). Continuing Dangers of Disinformation in Corporate Accounting Reports. Working Paper number 9634, National Bureau of Economic Research (downloadable from www.nber.org).

Kang, D. (2002). Transaction Costs and Crony Capitalism in East Asia. Working paper 02-11, Tuck School of Business at Darmouth (downloadable from www.ssrn.org).
Keefer, P. and Knack, S. (2002). *Boondoggies and Expropriation: Rent-Seeking and Policy Distortion when Property Rights are insecure*. World Bank Institute (www.ssrn.org).

Kettl, D. (2000). *The Global Public Management Revolution (A Report on the Transformation of Government)*. Brookings Institution Press, Washington.

Khana, R. and Palepu, K. (1999). *Emerging Market Business Groups, Foreign Investors, and Corporate Governance*. Working Papers W6955, National Bureau of Economic Research (downloadable from www.nber.org).

Kornai, J. (1979). Resource-Constrained versus Demand-Constrained Systems. *Econometrica*, volume 47, number 4, pp. 801-820.

Krueger, A. (1974). The Political Economy of Rent-Seeking Society. *American Economic Review*, volume 64, number 3, pp. 291-303.

Maskin, E. (1999). Recent Theoretical Work on the Soft Budget Constraint. *American Economic Review*, volume 89, pp. 421-425.

Murphy, K. (1998). *Executive Compensation*. SSRN Electronic Paper Collection, number 163914 (downloadable from www.ssrn.org).

Rose, W. (1987). Labor Rent Sharing and Regulation: Evidence from the Trucking Industry. *The Journal of Political Economy*, volume 95, number 6, pp. 1146-1178.

Smith, C. and Warner, J. (1979). On Financial Contracting (An Analysis of Bond Covenants). *Journal of Financial Economics*, volume 7, pp. 117-161.

Sorensen, A. (1996). The Structural Basis of Social Inequality. *American Journal of Sociology*, volume 101, number 5, pp. 1333-1365.

Tornell, A. (1999). *Privatizing the Privatized*. Working Paper W7206, National Bureau of Economic Research (downloadable from www.nber.org).

Tullock, G. (1967). The Welfare Costs of Tariffs, Monopolies and Theft. *Western Economic Journal*, volume 5, 224-232.

Tullock, G. (1990). *The Costs of Special Privilege*. (In Perspectives on Positive Political Economy, edited by J. Alt and K. Shepsle, Cambridge University Press, New York)

Tullock, G. (1993). *Rent Seeking*. The Shaftesbury Papers, 2. (Series Editor: C. Rowley). The Locke Institute. Edward Elgar, United Kingdom.

Tullock, G.; Seldon, A. and Brady, G. (2002). *Government Failure, A Primer in Public Choice*. Cato Institute, Washington D.C.

Whinctop, M. (2000). *Another Side of Accountability: The Fiduciary Concept and Rent-Seeking in Government Corporations*. SSRN Working Paper, number 258668 (www.ssrn.or).

Williamson, O. (1996). *The Mechanisms of Governance*. Oxford University Press, New York.
APPENDIX 1 THE STANDARD CASH FLOW MODEL (SCFM)

The so-called Standard Cash Flow Model (SCFM) states that, for any expected period \([t; T]\), it holds true that incremental cash flows furnished by assets at the end of such period, are to be distributed between stockholders and bondholders:

\[
\Delta CF_t \text{(assets)} = \Delta CF_t \text{(bondholders)} + \Delta CF_t \text{(stockholders)}
\]

(A1-1)

A detailed expansion on this matter can be found in Apreda ( ).

**Notation**

\(\Delta CF_t \text{(assets)}\) stands for "the change in cash flows from assets throughout the period \([t; T]\)". Sometimes, we are going to drop the incremental symbols, either when the context allows for it, or when some variable under study amounts to stock or accrual features to be likely dated at the end of the period.

Cash flows to bondholders are usually split down into the following components:

\[
\Delta CF_t \text{(bondholders)} = \text{interest}_t + \text{debt repayment}_t + \\
+ \text{debt repurchase}_t - \text{new debt issues}_t
\]

(A1-2)

and cash flows to be passed onto stockholders exhibit this structure:

\[
\Delta CF_t \text{(stockholders)} = \text{dividends}_t + \text{stock repurchase}_t - \text{new stock issues}_t
\]

(A1-3)

From the assets side, the breaking down of its main components leads to:

\[
\Delta CF_t \text{(assets)} = \Delta CF_t \text{(operations)} - \\
- \Delta CF_t \text{(provisions for working capital)} - \Delta CF_t \text{(provisions for long-term assets)}
\]

(A1-4)

while cash flows from operations are defined as

\[
\Delta CF_t \text{(operations)} = \text{Ebit}_t - \text{taxes}_t + \text{depreciation}_t
\]

(A1-5)

where "Ebit" stands here for "earnings before interest and taxes".

**Remarks**

As depreciation \(_t\) is not a cash outflow, after taking advantage of the tax deduction it must be added to assess the cash flows from operations. The same criterion holds for any likely intangible assets amortization.

*If there were preferred shares, then (A1-1) would be read as*

\[
\Delta CF_t \text{(assets)} = \Delta CF_t \text{(bondholders)} + \\
+ \Delta CF_t \text{(ordinary stockholders)} + \Delta CF_t \text{(preferred stockholders)}
\]

A nearly alike procedure holds for any outstanding lease, convertible bond, or preferred convertible stock.