AFME Position Paper
CRD 5/CRR2: Capital treatment of Software
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INTRODUCTION

Software is a strategic asset for banks, enabling them to serve clients where and when needed, to develop cyber security measures, and to deliver digital services competitively. Software displays some special characteristics, namely its capacity to generate income, its key importance in banking operations, and in facilitating the implementation and embedding of regulatory requirements.

In a way, as some say, "software is as necessary as an asset to produce banking services than a factory to produce cars".

It is positive to see the issue has been recognised by a number of MEPs, who have put forward proposed amendments to change the capital treatment of software such that it is recognised as a tangible asset. There are two main proposals under consideration:

- A general recognition of software as tangible and therefore risk weighted and not deducted from CET1;
- Recognition of software *with a market value* as tangible, jointly with an EBA draft regulatory technical standards to define the term "software" and to determine the methodology to calculate the market value. Software with no market value will therefore be deducted from CET 1.

We support the general recognition of software as tangible and set out in Section A the arguments for recognition of software as a tangible asset and for using the accounting value as the basis for risk weighting. The latter proposal has several pitfalls due to reference to market value and could lead to unintended consequences as set out in Section B.

SECTION A – RECOGNITION OF SOFTWARE AS TANGIBLE BASED ON ACCOUNTING VALUE

The current capital treatment of software, whose value is deducted from the capital ratio of banks, is inconsistent with (i) the actual accounting recognition of software as an asset instead of a simple expense; (ii) the evolution of the banking sector in an ever more digital environment and (iii) a level playing field with non-banking actors.

(i) the actual accounting recognition of software as an asset instead of a simple expense

Assuming there is an exemption from the current deduction approach for software, the question of the valuation of the software arises. The value of software is already available in the financial statements.

It should be noted that expenses incurred on internally generated software will be recognised as expenses, unless the costs incurred can meet strict recognition criteria. This is a safeguard to ensuring the value of internally generated software is not overstated and that any capitalised expenses relate solely to costs that can be reliably measured and attributed to the software.

In addition, the International Financial Reporting Standards (IFRS) accounting framework balances the economic rationale to recognise the value of software and the necessity to adjust the valuation of software over time. Software is recognised at cost less accumulated depreciation, amortisation and impairment losses, booked in the profit and loss account:

- Software is amortised, using the straight-line method over the useful life of the asset, and depending on its type, over periods of no more than 8 years in the case of infrastructure developments and 3 years or 5 years in the case of software developed primarily for the purpose of providing services to customers.

− Depreciable intangible assets are tested for impairment if there is an indication of potential impairment at the balance sheet date (the new recoverable amount of the asset is compared with the carrying amount[1]).

Consequently, the amortization and depreciation gradually impact the profit and loss accounts, and indirectly retained earnings and CET1 (old systems already fully deducted). From a prudential perspective, the initial investment value of software is then deducted in the profit and loss accounts via the amortization and depreciation, and after a limited period of time, the accounting value of software is naturally 0 (See Annex for illustrative example).

In other words, the IFRS, by allowing the recognition of an asset, validate the idea that software is an investment – whose value declines over time – and not an immediate expense of the company. The use of accounting value benefits from simplicity. In addition, it has the benefit of being justifiable, verifiable (by auditors) and comparable.

(ii) the evolution of the banking sector in an ever more digital environment

The fact that every Euro that an EU bank invests in an IT development needs to be paid with one Euro of the most expensive category of funding (CET 1) is a significant disincentive for investments in innovation. In other words, the current regulatory treatment of software does not favour technological or human investment in Europe and could jeopardise the incentive for financial institutions to invest in the technology necessary to undertake their digitalization while remaining competitive.

The harsh regulatory treatment forces banks to back the investment in software with the same amount of capital, instead of using this capital to support lending or technological transformation. **This makes little business sense for banks as it discourages investment in software and in upgrading their digital infrastructure. Furthermore, there is little incentive to support technological innovation as the end product will not be recognised as an asset with value in the capital framework.**

(iii) a level playing field with non-banking actors and with banking actors from (some) other jurisdictions.

The banking industry faces the digital challenges in competition with emerging technological players that do not have to face the heavy regulatory burden imposed on the banking sector.

As a result, remaining competitive in the digital market is much more costly for EU financial institutions than for other competitors. In particular, there may be regulatory differences among jurisdictions and sectors that pose competitive disadvantages for European financial institutions compared to both other sectors, such as digital players, and other jurisdictions, such as the United States.

(a) Fintech companies are not only a major competitor but also partners for European banking sector. When a bank acquires a Fintech, its main asset (the software) is automatically depreciated given the deductibility that has to be applied to calculate capital levels for banks (accounting treatment described below). If the buyer were a non-bank, the deductibility would not take effect. This is like assigning a zero value to the search engine of Google if this were bought by a bank. Because of this, banks may be less open to investing in these companies.

(b) Software has become a core asset for the banks business models around the world. However, **there is evidence of different treatment of software in some jurisdictions, including the US where our research shows instances of capitalisation of software as a tangible asset in the financial statements, thereby subject to regular risk rating and not deducted from CET1.** Variation in capitalisation of software between tangible and intangible assets drives materially different regulatory treatment. **For this reason, designation as tangible in the prudential framework would be welcome to ensure consistent treatment regardless of accounting framework or individual firms choices.** As banks become increasingly digital this will become a more material

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[1] The depreciable amount is calculated after deducting the residual value of the asset.

issue and it will be increasing important to remove any artificial hurdle to banks investing in digital, creating value for the economy as a whole and leading worldwide innovation in the area.

To sum up, the European prudential treatment of software creates competitive disadvantages for European financial institutions in comparison with other entities that must not deduct these investments, such as US institutions. This is particularly burdensome from the point of view of solvency and capital requirements, causing any investment in innovation to become automatically more expensive for the European financial institutions that are subject to the prudential framework compared to those entities that remain out of scope of the framework. It is definitely an **obstacle which restricts technological investment in the EU banking system compared to other jurisdictions and is a factor of unfair competition.**

SECTION B - IMPLICATIONS OF REFERENCE TO MARKET VALUE

Referring to market value would be a disincentive for investing in a bank's IT infrastructure or supporting innovation

It is market practice for the financial industry to either develop systems internally or to buy a technology and to develop systems to adapt it to the specificities of each institution. Indeed, **IT infrastructure cannot be standardised from one bank to the other.**

By essence, this aspect is not captured by external transactions i.e. market value cannot be determined by a purchase or purchase of an equivalent software due to its idiosyncratic nature. Therefore, reference to market value will restrict recognition of software as a tangible asset to 'off-the-shelf' purchased software, thereby retaining the penal treatment of deduction from CET1 for software that has been tailor-made for each institution to be the best fit for its business model and service offering.

The global economy is becoming digital and the financial sector must face the critical challenge of its digital transformation.

Establishing and verifying the market value would be burdensome and expensive due to its subjectivity and because it is not traded on a liquid market

Having recourse to a market valuation of a given software, assuming such market valuation exists, would require the contracting of periodic external valuation reports. It means, at least, yearly benchmark analyses based on comparable transactions prepared by digital experts, which would be an expensive process whilst investment should be focussed on innovation and digitalization.

Such an approach would negate the fact that software is tailored-made for each institution and we can expect a lack of comparable transactions. It would generate burdensome debates between experts of each technology concerned. Indeed, the **market value is closely linked to its subjective accuracy** in a particular context, which cannot be fully appreciated by an external party. **Indeed, reference to market value would be a trap because software is not traded on a liquid market and therefore difficult to justify.**

The burden and expense of referring to market value would have a disproportionate impact on smaller institutions

Instead of focusing on R&D investments, referring to market value would require material expenses:

- to onboard external firms to perform the market value analysis of each software,
- to update the analysis periodically.

On the one hand, it would be particularly burdensome for large institutions with a significant volume of software. On the other hand, it would be even more penalizing for smaller institutions, which would be faced with increased fixed costs (fees paid to advisors) and could be discouraged in their digital transformation process.

Because of these negative effects, rejecting the simple approach (reference to the amounts in the financial statements) would become counterproductive.

SECTION C - CONCLUSION

Out of all of the assets that form part of the intangible asset items of an institution, software displays some special characteristics, namely its capacity to generate income, its relative importance in banking operations, and in facilitating the implementation and embedding of regulatory requirements. These aspects indicate that software has value and hence **should be treated in a different way than other intangible assets**.

Eliminating the deduction from capital would not result in overestimating the value of old legacy IT system as the accounting value of those assets has appropriate safeguards to ensure is already subject to strict depreciation rules mentioned here before. It should be reminded that full depreciation is equivalent to capital deduction from a prudential perspective, as it impacts the profit and loss accounts, and therefore retained earnings and CET1. Furthermore, additional benefits of using accounting value is that it is justifiable, verifiable (by auditors), simple and comparable.

There is a legitimate concern about the capital losses which may appear in case of a decline in value of any asset class, and this concern is typically addressed by applying capital requirements in the form of risk-weights. **Treating software differently from other intangible assets in relation to the deduction from regulatory capital does not necessarily imply that banks would not face a capital requirement in front of software. Neither does it lead to the creation of an artificial asset in the accounts since software is already recognised under the existing IFRS framework.**

Actually, software would simply fall within the scope of ordinary treatment of assets, with a risk-based approach, such as in the approach our research indicates has been applied in the US (software can be recorded as "Property, Plant and Equipment" in the financial statements, with a resultant RW of 100%, and not deducted from the CET1).

Conversely, the use of market value leads to unintended consequences of disincentivising investment in a bank's IT infrastructure, disincentivising innovation, is unduly burdensome and expensive to validate and would have a disproportionate impact on smaller institutions. **As such, we ask there is general recognition of software as tangible and that this is not limited to software with a market value.**

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About AFME

AFME represents a broad array of European and global participants in the wholesale financial markets. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. We advocate stable, competitive, sustainable European financial markets that support economic growth and benefit society. AFME is the European member of the Global Financial Markets Association (GFMA) a global alliance with the Securities Industry and Financial Markets Association (SIFMA) in the US, and the Asia Securities Industry and Financial Markets Association (ASIFMA) in Asia. AFME is listed on the EU Register of Interest Representatives, registration number 65110063986-76.

ANNEX
ILLUSTRATIVE EXAMPLE

The example below is intended to illustrate the current treatment of Software in the CRR versus that which we propose. It is based on an item of software that has an initial value (t0) of €100 and is fully depreciated / amortised over a 5-year period using the straight-line depreciation method i.e. the cost of the asset is spread equally over its useful life.

Current Capital Treatment

As highlighted in the chart, from initial recognition of the software on the balance sheet at €100, the residual value of the asset is fully deducted from regulatory capital such that no value of software is recognised throughout the useful life of the asset.
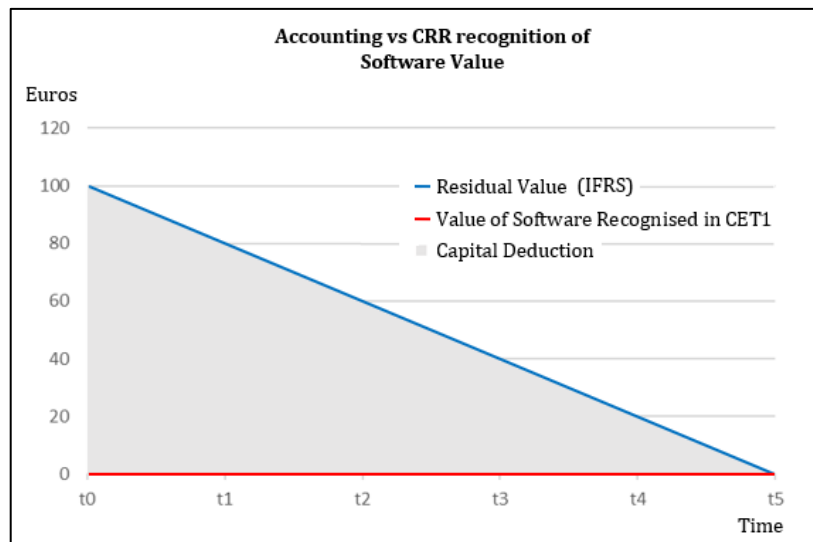
Proposed Capital Treatment

As highlighted in the chart, if the accounting value is used as the appropriate reference value to apply a risk weight as proposed, the value of the asset would reduce evenly over the useful life of the asset. The value of software would closely follow the accounting value, with an additional haircut to reflect the capital deduction, which would be at least 8% of the residual accounting value of the asset.
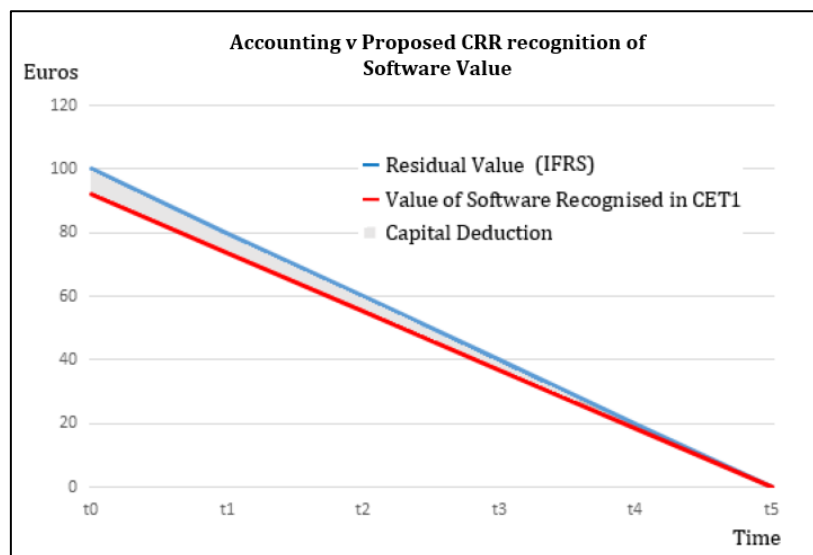
It should be noted that if there were an additional impairment charge or a reduction in the expected useful life of software after initial recognition of the software, the reduction in accounting value would be reflected in retained earnings and would therefore automatically be reflected in a reduction in the value of software recognised in regulatory capital. An additional capital charge would continue to apply to the residual accounting value and therefore, the value of software recognised for regulatory capital purposes, would always be less than the accounting value by a factor of the risk weighted capital charge until the residual value is €Nil.