IMPACT ASSESSMENT GUIDELINES

IOSCO

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A. BACKGROUND INFORMATION ON IA

Introduction

Decisions about regulatory policy and practice should be based on sound analysis. Impact assessment (IA hereafter) is a key tool in this regard. IA draws on economics and other social sciences to provide an analytical framework that ensures that policy proposals are justified in terms of a proper understanding of the nature of perceived problems.

As a disciplined approach it helps to identify the past or likely future effects of regulation and supervision on markets and, ensuring engagement with all affected parties, helps policy makers and stakeholders alike develop an appreciation of the respective (dis)advantages of previous policy responses and proposed policy options. In this way, it provides new information that can help policy makers to describe and explain the decision making process and thereby improves the way in which the most effective policies are identified, chosen and implemented. Moreover, through its formal and informal consultation procedures, IA makes regulatory policy more transparent and thus can help to make IOSCO more accountable. It is also a means of communication between IOSCO, the different national regulators involved, the regulated firms and other affected or interested parties. IA is therefore a key tool to develop IOSCO's Principles and Policies.

Limits of IA

Within the IOSCO policy making process, the main advantage of IA to the work which falls within the remit of IOSCO is to submit policymaking to a systematic and structured approach, provide a credible evidential basis for the advice and proposals and therefore give to this work much more weight.

An outcome of an IA is, however, not a substitute for decision making; it is merely a tool to assist decision makers. Therefore, IOSCO will give the results of IA exercises due consideration, but they will not be bound in their decisions by the outcome of an IA. In other words, IA - as a disciplined approach to policy making - will help inform the policy making process, but not become a substitute for it. Nevertheless, there is an understanding that any decision that deviates markedly from the findings of an IA exercise would require an explanation.

Proportionality and flexibility

An IA needs to be proportionate to the significance, complexity and uncertainties of the problem or problems to be solved. Otherwise, it risks consuming scarce resources inefficiently or being insufficiently robust. Both would be counter-productive. The principle of proportionality will allow IOSCO to keep the detail of IAs within reasonable limits.

For example, the measures analysed through an IA are likely to have significant structural and cost implications to consumers/investors and/or market participants. This can be considered a precondition for the need to carry out an IA. But when there is a reasonable presumption that the impact will be insignificant, then there is no need for an IA.

The time available for policy work by IOSCO is usually very tight. Given these time constraints, IOSCO should commit to the use of initial, high-level IA. These primarily qualitative exercises could be carried out before a mandate for a particular problem is formulated by Standing Committee and Task Force Chairs in order to help ascertain the appropriate scale of the analysis to be pursued after the mandate is issued. In any event, the use of high-level IAs is intended to simplify matters and avoid procedural over-complication so their role and use must be clearly circumscribed.

What the reader can expect from these Guidelines

The reader who is inexperienced in IA matters should be able to grasp all its essential aspects by reading through the "IA Guidelines in short" section (pages 7 to 19) which follows. There, each of the steps in the IA process is explained with references to the corresponding sections in the main text. This should make it easier to obtain more detailed information on each step as and when it is required.

Some care is taken to stress the distinction between Screening IAs and Full IAs and the way they are embedded in the IOSCO´s wider policy making procedures. Then the main steps to be followed when preparing an IA report are set out. Those who have to produce IA reports may find the "IA Summary Tables" at the end of these shorter IA Guidelines helpful (pages 20 to 21).

The main text explains each step in the IA framework in more detail. However, an effort has been made to strike a balance between, on the one hand, not overloading the reader with information (for the curious there is an annotated reference list at the very end of the Guidelines), and, on the other hand, providing sufficient practical detail and advice in order to make it easier to overcome some of the possible obstacles on the way to producing an IA report and pursuing the IA work successfully to its conclusion.

B. IA IN STEPS

The first four steps of IA should be carried out from an early stage of policy making. Their value is greatest when policy options are still open.

The IA process can be summarised using the following steps (the sections indicated in brackets give more details on each of the different points under consideration):

IA Methodology

1. Identify the problem (*Section 1.2*) and the threat it poses to regulatory objectives. Market and regulatory failure analysis provides a coherent framework for analysing problems (*Section 1.3 and 1.4*) and the risk they pose to regulatory objectives (*Section 1.5*). Decide whether or not intervention in the market is justified (*Section 1.6*).

2. Develop main policy options (*Section 1.8*) – it is important to identify a range of policy proposals, including the "do nothing" (or "status quo") option and "market solutions", i.e. solutions without any regulation.

3. Assess the likely positive and negative effects as well as the net effect of each policy option (*Section 1.10*). Selection of the appropriate methodology is crucial in order to ensure a valid evidence base. It is important to consider possible side effects and unintended consequences of the policy options. The consistency and cumulative impact of implementing several policies simultaneously should also be considered because of the possibility of links between policies which might at first seem unrelated – for instance because they concern different policy areas.[1]

4. Compare options (*Section 1.12*), i.e. the balance between positive and negative effects, and identify a preferred policy option (this is not a choice of policy option because the IA process is an aid to the decision-making process, not a substitute for it).

Process

1. Carry out the IA (Steps 1-4 above).

[1] Informal consultation with relevant stakeholders may be helpful at this stage to gather information and /or data that may be needed to make a proper assessment of policy options.

2. Consult on the draft policy proposal (*Section 2*) which also reports on the IA (*Section E* of the "IA Guidelines in short" section and *Section 4*) by communicating the way in which steps (1) to (5) have been considered in a clear and effective way to all stakeholders. The stakeholders are given an appropriate response period.

3. Publish the responses received and give public feedback that explains what the final policy decision is and why it was made given the results of the consultation (*Section 2.2.3*).

4. Once it is implemented and enforced, keep the policy under review as appropriate (*Section 3*).

C. THE IA PROCESS

IA should be proportionate to the problem at hand. This means that it need not necessarily be a detailed, costly and time consuming process. It is possible to carry out the steps identified above at a relatively high level and, by restricting the process of consultation, relatively quickly. Indeed, there is no benefit in conducting costly, lengthy IA exercises where it is apparent that anticipated market impacts will not be significant. A high-level IA will often be sufficient to analyse the problem under consideration and identify appropriate policy options.

High-level IA

The purpose of a high-level IA is to consider relatively quickly and on a principles basis the justification for a policy initiative at conception and to assess whether or not a Full IA is required. Such work originates from a number of sources, including issues raised by expert groups, internal consideration of current market trends or by one of the IOSCO Committees. The objective here may, for example, be an efficiency enhancement, or a change to current supervisory practices to promote convergence.

In such cases, it may be most appropriate to conduct a high-level IA prior to the drafting of the discretionary mandate given by IOSCO to a working group. It could assess in high-level terms the nature of the problem, its likely significance in terms of structural impact and cost, its relevance to IOSCO's objectives, as well as obvious policy remedies (including whether it is likely that the problem can be solved without the need for new regulatory policy). The likely positive and negative impacts of proposals could also be considered, as well as their overall or net impact. High-level comparison of policy options is often to dismiss some proposals and identify areas that will need further analysis.

Ideally, high-level IA ideally should consider steps 1-5 of the previous section, though this would typically be done relatively quickly and at a high-level (or on a principles basis). Also, at this stage, and subject to the materiality of timing constraints, it may well be useful to conduct an informal consultation of interested parties to deepen the IOSCO's understanding of the issues (or the scale of any limitations in understanding) at this initial stage.

Once the high-level IA is completed, a brief report (using, for instance, the relevant IA Summary Tables of section E below) could be sent to the relevant IOSCO Committee which will consider issuing a final mandate. The report could contain a recommendation on whether or not the high-

level IA already carried out is sufficient to assess the problem and the policy remedies, or whether a further IA (a Full IA) is needed. The recommendation should also refer to resource and timing issues associated with a Full IA, regardless of whether or not a Full IA is recommended. This will clarify for the chairs the implications of any decision they have to take in relation to the particular problem under consideration.

Full IA

In these Guidelines an IA carried out after the issuing of a discretionary mandate by a Committee is referred to as a Full IA. Such IAs can range widely in scope, from exercises that extend the high-level IA only modestly to substantial pieces of work that go considerably further than the initial IA. What matters is that the IA should provide a sufficient basis upon which to reach clear conclusions that will inform the decision-making process. A Full IA at a larger scale is appropriate in particular circumstances only, e.g. when the problem identified is unclear or difficult to analyse (but potentially important), or likely to be important in terms of its impact.

When a mandate by IOSCO states that an IA will accompany a regulatory standard, IA work should start at the same time as the policy discussions. This helps to ensure that IA promotes discipline in identifying the problem at hand and in subsequent policy discussions, and encourages experts to put forward only well argued policy proposals. However it will only be feasible to start assessing the impact of policy options once these have been formulated by the expert group which can occur at a later stage of the discussions.

Within the IOSCO policy making processes, it may be agreed to accompany policy proposals by an IA. The expert group should consider the consequences of a proposed policy and consider alternative policy options, also taking into consideration the feedback received by external experts. This should also take into account comments received.

Again, within IOSCO's policy making processes, assessment and justification of policy proposals may form an integral part of a (published) Consultation Paper. The IA should normally have a **qualitative part**, and may often have a **quantitative part**. These should be built into the consultation processes of the Committees.

The timing of some of the IA work differs slightly depending on whether there are one or two (public) consultations:

- where there is only *one round* of consultation, the qualitative (and quantitative, if there is to be one) parts of the IA should be prepared for inclusion in this consultation paper;

- where there are *two rounds* of consultation, the qualitative IA should be published with the *first consultation paper*. The quantitative part of the IA (if there is to be one) should be conducted in the interval between the two public consultations and published in the *second consultation paper*. The whole IA will have to be published in any (public) consultation on one single policy proposal.

Proceeding through two consultations is a way to deal with situations where the policy problem is complex, where it is difficult to get clear about the impact of different policy options or where the final decision about the preferred option is not straightforward.

Governance – who does what:

IOSCO recognises the importance of having effective internal governance and quality controls in place in order to ensure that IA exercises make a genuine contribution to the policy making process. To this extent, IOSCO considers that the soundness and independence of an IA study will be safeguarded by (a) the involvement of IA experts from within IOSCO but who are independent of the committees' relevant policy making expert groups, (b) the various panels of stakeholder groups that assist the IOSCO Committees, and which are always invited to comment during the policy-making process, and finally (c) the public consultation.

The relevant policy making expert group chairman should ensure that members of the group are assigned to draft the IA.

Where possible and appropriate, one or more IOSCO IA experts should attend the meetings of the expert group to advise on the use of IA during their work. Such advice should proceed from the inception of any new work stream. It may also be necessary for members of the expert group to receive training of some sort in order to improve their understanding of the application of the IA process.

Advice from the IOSCO Committee's IA experts will also be provided during the high-level IA process.

D. THE IA SUMMARY TABLES

PROBLEM & REGULATORY / SUPERVISORY RESPONSE

Table-1

MARKET / REGULATORY FAILURE ANALYSIS	
What is the problem? Is the issue identified likely to have an international dimension with an impact on market participants/end that requires international regulatory convergence?	
What evidence shows that the problem is significant?	
Is the problem due to market failure? What is the market failure?	[Information about market failure analysis can be found in section 1.3. of these Guidelines]
Is the problem due to regulatory/supervisory failure? What is the regulatory/supervisory failure?	[Information about regulatory failures can be found in section 1.4. of these Guidelines]
What regulatory objective is put at risk by the problem?	[Information about regulatory objectives can be found in section 1.5 of these Guidelines]
Is it or is it not likely that the problem will be solved over time without a new regulatory policy? Give reasons.	
Is the case for regulatory/supervisory action justified?	

Table-2

REGULATORY POLICY RESPONSE	
Policy option 1	[Information about specific and operational objectives can be found in section 1.7. of these Guidelines]
Specific/Operational objective	[Information about specific and operational objectives can be found in section 1.8. of these Guidelines]
How would achieving the objective alleviate/eliminate the problem?	
Policy option 2	
Specific/Operational objective	
How would achieving the objective alleviate/eliminate the problem?	
Policy option 3	
Specific/Operational objective	
How would achieving the objective alleviate/eliminate the problem?	
Which policy option is the preferred one? Explain briefly.	
Is the policy chosen within the responsibility of IOSCO? If not, what other body is concerned / needs to be informed or consulted?	

IMPACTS OF THE PROPOSED POLICIES

Table-3

BENEFITS & COSTS OPTION-1 etc.	QUALITATIVE DESCRIPTION	QUANTITATIVE DESCRIPTION
Benefits		
Regulator's costs		
Compliance costs		
Quantity of products offered		
Quality of products offered		
Variety of products offered		
Efficiency of competition		

Table-4**

POLICY OPTIONS	SHORT TERM			LONG TERM			OVERALL NET EFFECT
	NEGATIVE EFFECTS	POSITIVE EFFECTS	NET EFFECT	NEGATIVE EFFECTS	POSITIVE EFFECTS	NET EFFECT	
Option-1							
Option-2							
Option-3							

Table-5***

OPTION 1 etc.	EFFECT / IMPACT	LIKELIHOOD	NET BENEFIT
Scenario-1			
Scenario-2			
Scenario-3			

*** This table can be prepared for policy options whose costs or benefits cannot be determined with precision. Likelihood and impact can be indicated by the categories high, medium, and low.

CONSULTATION & REVIEW

Table-6

Consultation period	Start:	End:
Participation	(low, medium, high)	
Summary of reactions received		
Feedback publication date		
Did the feedback result in a policy change? Explain briefly.		
Proposed review date (when appropriate)		

THE IA GUIDELINES

1. PREPARING AN IA

1.1. WHY AND WHEN TO PREPARE AN IA?

IA is a way of identifying whether or not there is a problem in the market, how serious it is, and whether or not the situation can be left to the market to resolve or can be improved upon through some form of regulatory response. It implies assessing the likely effects of proposed regulatory changes or the past effects of previous regulatory interventions. It involves a structured analysis that helps clarify the potential advantages and disadvantages of proposed policy options and whether or not they would have the desired impact in practice. IA helps to identify unforeseen side effects and hidden costs associated with regulation. It also provides for consultation with stakeholders to make regulatory policy more transparent and to ensure that their views and interests are understood and taken into account as appropriate. Thus, IA provides information that can help policy makers to rationalise the policy making process and thereby improve the efficiency with which the most effective policies are identified, chosen and implemented.

The preparation of an IA enhances the policy making process in a number of ways:

- it provides a coherent framework within which to conduct evidence-based policy making, one that spans the regulatory policy making process from beginning to end;
- the use of market and regulatory failure analysis ensures accurate identification of problems and the threats they pose to regulatory objectives, which in turn leads to the choice of effective and efficient policy solutions amongst a wider range of possible policies;
- it saves time in the long run as there is a reduced risk of regulatory failure;
- formal and informal consultation with stakeholders takes place at various stages of an IA and by enhancing the transparency of the policy making process and keeping all affected parties informed, in turn affords the policy making process enhanced credibility and greater accountability; and
- IA preparation enhances organisational credibility because it is fully in line with the European Commission's own approach to evidence-based policy making (and with OECD better regulation guidelines).

An IA should be prepared as a matter of course whenever a new policy initiative with structural and cost implications is proposed. For this to happen effectively, the use of IA should be firmly embedded into the organisation's policy making procedures and carried out from an early stage of policy making. If IA is not integrated into existing institutional structures then its use risks being haphazard, incomplete and ineffective in generating the benefits described above.

1.2. WHAT IS THE PROBLEM?

The first key analytical step in the proposed IA methodology is to establish whether or not there is an economic case at all for regulatory intervention by conducting a Market and/or Regulatory Failure Analysis (MFA/RFA). At first the understanding of the perceived problem will be intuitive. However, it is essential for good policy making that such intuitions are confirmed or corrected by a thorough analysis.

In essence, this exercise consists in answering the following questions:

- Is there a significant market failure and/or regulatory failure and what is its nature?
- If no intervention or further interventions take place, will the market correct the failure by itself in the short term?

At a later stage (see section 1.10), this will be complemented by an answer to the following question:

- Can regulatory intervention improve the situation in a way such that the benefits obtained are larger than the costs generated?

If significant market and/or regulatory failures are identified, the market is not able to correct the failure by itself, and there is a policy which generates a benefit which is larger than its costs, regulatory intervention is justified. If no such policy option could be identified then it would be best to leave the market or regulatory failure unaddressed – even though the market may not work very well.

In what follows, the concepts of market and regulatory failure are explained further. The need to link such "failures" to regulatory objectives is discussed more fully in one of the next sections (section 1.8) as is the identification of a policy with a significant net benefit to be chosen from a range of alternative policy options (section 1.11).

1.3. IS THERE A MARKET FAILURE?

Market failures are a feature of markets which are inefficient, where inefficiency refers to a market in which it is possible to generate an overall welfare gain. By identifying the different causes of market failure it is possible to consider what types of policy response might generate such an improvement in welfare.

In an efficient market:

1. prices reflect all costs, including costs to third parties, i.e. the market failure **"externality"** is absent. This type of market failure can occur where financial services firms fail to take account of the effect that their actions might have on the wider market place (like the failure of a key player in the market);

2. consumers and financial services companies take decisions that reflect all possible, relevant information, i.e. the market failure **"information asymmetry"** is absent. This is often not the case, for example, because of consumers' limited knowledge about product quality. It is important to note that information asymmetries generally only lead to market failure in circumstances in which an informational advantage is exploited. This can happen when two parties' incentives are misaligned;

3. firms cannot make excess profits by charging prices in excess of "marginal" cost (which is the increase in a firm's total cost when output is increased by a very small unit, and in the long run includes the cost of capital), i.e. the market failure **"market power or lack of competition"** is absent; and

4. when there is rivalry between the consumption of a product and market participants can be excluded from the consumption of this product. In other words, the market failure **"public good"** is absent (financial stability is an example of a public good as it benefits many market participants each of whom is likely to contribute little privately to maintain and enhance it).

A more detailed explanation and examples of these four market failures are included in Appendix 3. There are other market failures, but focussing on these four will capture the relevant substance of market failure in the area of financial markets and avoid undue complexity.

Why does the presence and extent of these market failures matter? In an efficient market firms produce at the lowest possible cost, in terms of resources used, and consumers buy the products they want at the minimum possible price for a given quality. Moreover, at this price, supply and demand are in balance. To the extent that transactions lack these characteristics, there is a "welfare loss" - a waste of resources - which regulation may be able to address. But regulation can only be justified by a market failure when it can improve on the market solution to that market failure. There may be

various circumstances in which regulation and supervision are able to achieve this, but there are also other situations in which they are not of any help or even might make things worse.

1.4. IS THE PROBLEM DUE TO REGULATORY FAILURE?

Regulatory failure, like market failure, is an economic justification for further regulatory intervention (including deregulation). It refers to an intervention whose economic costs were higher or economic benefits lower than was originally expected such that the net effect is harmful or more harmful than it need have been.

This typically happens where regulation has unforeseen and unintended effects arising from interaction with a specific characteristic of the market affected, or when a supervisory practice is no longer adapted to the realities of a rapidly evolving market (which can be referred to as a supervisory failure, a specific sub-set of regulatory failure). For example, an intervention may have been intended to increase welfare but in fact reduced it by distorting rather than facilitating competition or by not being correctly targeted on the relevant market failure. Equally, it may have been expected that an intervention would reduce welfare but the reduction may in practice have been much greater than expected. This might happen because of unforeseen effects of the intervention on other economic markets or because demand in the targeted market was much more sensitive to price increases than was believed to be the case.

On the latter point, it is important to keep in mind that regulatory interventions generally do increase the cost of producing financial services. In addition to the direct increase in prices or reduction in sales that this might lead to, prices can also be affected by competition and market parameters, like interest rates. What then needs to be analysed is the effect of the cost increases and how these effects balance with other effects: (i) will the costs be reflected in prices? i.e. will costs be passed to consumers?, (ii) if costs are reflected in prices, by how much will sales fall? and (iii) will the efficiency of competition be negatively affected and what might this imply for the consumer in terms of prices and supply? These are often difficult but always important questions to answer. More generally speaking, when assessing a policy, it will be important to consider the direct costs as well as indirect costs of regulation (this issue will be dealt with in more detail in section 1.11 on the assessment of costs).

> *For example, one reason for the new regulatory frameworks in banking (Basel II) and insurance (Solvency II) is that the previous regimes (respectively Basel I and Solvency I) imposed a major economic burden on the industry and society.*

To summarise, in the identification of regulatory/supervisory failure, there are at least five possibilities to keep in mind.

- First, the market may not have been subject to a significant market failure and the observed problem may be due to the effects of existing regulation/supervision. This could be regulation/supervision that was wrongly prescribed for this market or regulation/supervision that was intended to affect another market but unexpectedly impacted on this one too.

- Secondly, the market may have been subject to a significant market failure and regulation was introduced that was successful in correcting it: the problem we observe may be due to a different market failure and have another cause. It may, for example, be a side effect of the successful regulation or of other regulation.

- Thirdly, the relevant market may have been subject to a significant market failure and regulation was introduced that actually made it worse.

- Fourthly, the relevant market may have been subject to a significant market failure and regulation was introduced that has so far failed to work but may do so in due course.

- Fifthly, the case when national regulators do not have the authority to act on a matter or when bureaucratic issues block the function of the market.

1.5. MARKET/REGULATORY FAILURES AS RISKS TO IOSCO OBJECTIVES

The identification of a significant market or regulatory failure that is not expected to be resolved in the short to medium run by the market is not on its own sufficient to justify the consideration of regulatory intervention. This also requires that the market or regulatory failure be identified as carrying some particular threat or risk to regulatory objectives. These may cover:

- market confidence and/or financial stability (typically by addressing negative externalities, market power and public goods);

- market integrity and proper functioning of the financial system (typically by addressing asymmetries of information and market power)

- consumer/investor protection and /or public awareness (typically by addressing information asymmetries and market power);
- reduction of financial crime (typically by addressing information asymmetries and market power);
- facilitating innovation (typically by addressing information asymmetries and market power);
- keeping adverse effects on competition to a minimum.

The task of identifying market failures is made much easier by the fact that particular market failures are principally, though not exclusively, associated with IOSCO objectives.

The following four-step procedure should help in identifying market and regulatory failures:

- determine whether the problem at hand is due to a significant market failure by assuming the complete absence of all financial regulation (to do this, it is usually helpful to consider what the relevant market is);
- determine which objective – e.g. market confidence, or investor protection - is threatened by the failure and thus makes it an object for policy making;
- determine whether any relevant market failure identified has been targeted by regulatory intervention (including rights or obligations created by primary legislation or the common law);
- determine whether there is a regulatory failure; a regulatory failure may exist in addition to a market failure which may have been already identified; note that when no market failure has been identified and regulation is in place, there is likely to be a regulatory failure given that the intervention will almost certainly have imposed costs whilst at the same time deriving no benefits.

Filling in table 1 of the IA Summary Tables will be helpful when answering these questions. Once the above steps have been carried out, it should be clear whether there is a significant market and/or regulatory failure in the market(s). If there is not, then net economic benefits cannot be achieved. This would mean that there would be no economic basis for regulatory intervention, and that is what the MFA/RFA in the IA should say.

Both in the MFA and the RFA, stakeholder analysis is important. A stakeholder analysis consists firstly in identifying groupings of relevant stakeholders, such as consumers, market players, trade bodies, etc. Secondly, to every group a short description of key features and incentives should be added (including reference to market power when appropriate). The IA questionnaire in Appendix 1 might be helpful in this respect.

One key outcome of MFA/RFA is a rigorous analysis of whether or not there is an economic case for considering regulatory intervention. In summary, this section of an IA needs to say one of two things. These are:

- We examined markets XYZ. We found no uncorrected market or regulatory failures relevant to regulatory objectives and significant to the problem that we are addressing. Therefore, no case for intervention is supported on economic grounds.

- We examined markets XYZ. We found the following uncorrected market and/or regulatory failures: ABC. These are relevant to the regulatory objectives and significant to the problem that we are addressing because they cause LMN. The evidence is RST. These failures therefore provide an economic case for considering regulatory intervention.

Importantly, where the analysis does not come to a conclusion about whether there is definitely an economic case for considering intervention, it must make clear what further questions will have to be answered and gaps in knowledge filled in order for a conclusion to be reached. It must also set out what further work will be done in order to address these shortcomings. (One of the reasons for conducting a Screening IA is to assist in this process.)

Wherever possible, the analysis should be based on objective evidence. Inevitably, parts of IAs will have to be based on judgement rather than evidence – and economic evidence is often circumstantial and typically based on a probabilistic notion of causation. But the analysis should always make clear which parts are based on evidence and which on judgements.

Only market and regulatory failures which present a risk to regulatory objectives can justify regulatory intervention. However, a further condition also needs to be met: the regulatory action addressing the failure will have to generate positive effects which significantly outweigh its negative effects. It is absolutely essential that this issue is addressed as part of any IA (see section 1.10).

1.6. WHAT ARE THE REGULATORY OBJECTIVES?

The aim of regulatory policy should be to bring the market closer in line with organisational regulatory objective(s). To identify the effects of policies it will be useful to make this link explicit.

Experience has shown that distinguishing between different kinds of policy objectives makes it easier to establish the link between policies and regulatory objectives which are high level in nature. The following types of objectives can be distinguished (three examples of each are presented):

- General objectives: examples include (i) financial stability, (ii) the proper functioning of markets, and (iii) consumer protection;
- Specific objectives: examples (which link respectively to the general objective examples above) include (i) capital adequacy provisions, (ii) disclosure regimes, and (iii) conduct of business rules; and
- Operational objectives: examples (which link respectively to the specific objective examples above) include (i) specific rules relating to the use of market or credit risk evaluation models, (ii) rules on the publication of prospectuses, and (iii) rules setting out specific terms of business requirements.

Typically, the general objectives correspond to IOSCO's regulatory objectives which will already have been considered during the problem identification phase of an IA exercise. To make regulatory policy practical, identifying related specific and operational objectives may make it easier to think about the causal steps through which regulatory proposals are supposed to generate benefits or ameliorate risks that are relevant to a Committee's regulatory objectives.

Specific objectives represent a subset of general objectives and consist of broad types of policy solution (e.g. stopping mis-selling, providing market participants with appropriate information).

Operational objectives are the outcome of the process of implementing new regulations designed to put specific objectives into practice (i.e. through specific rules and guidance). It should be kept in mind that unless and until the operational objectives are realised, it is not possible to comment on the realisation of specific and general objectives.

One reason for the distinction between specific and operational objectives is the time gap which often exists between the realisations of these two objectives. Typically, the latter is immediately observed whereas the former is realised only over time and may depend on more than one operational objective being met.

However, the distinction between specific and operational objectives is sometimes difficult to make and when this is the case it should not be insisted upon. Specific and operational objectives usually

become clear in the process of thinking about the problem and possible solutions to it. It will not always be possible to clarify them from the outset.

1.7. WHAT ARE THE POLICY OPTIONS?

Once it is clear that regulatory measures have to be considered seriously, there might be several policy options – and policymakers are advised to consider a reasonable number of alternative policies in order to ensure that they are proposing the most appropriate policy.

Within the range of options to analyse, the status quo should always be considered as a possible policy. Note that the option to "do nothing", i.e. the status quo which might include regulation, is not necessarily the same as the "market solution" which consists in not intervening at all in the market (no regulation) and to rely on market forces alone to solve the problem. The "market solution" should also always be considered as a serious policy option. This is perhaps obvious when the reason for the problem is regulatory failure, but it is also true in the case of a market failure which can be expected to self-correct over a relatively short period of time and because policymakers will need to ensure that their proposed policy will not introduce a regulatory failure.

Policy options should be sensible. It is in general not enough to consider, for example, besides the preferred option, the status quo (the 'do nothing' option) and some other policy when these two latter options are both clearly unreasonable. To be credible, the discussion of options should convey insights into the difficulties of policy choices as they are experienced in the process of policymaking.

1.8. THE IOSCO PERSPECTIVE TO ADOPT

The large number of IOSCO member states means that it is unrealistic to expect IOSCO working groups, in their policy deliberations, to prepare IAs for every member state and then to consider the aggregate effect on the single market in financial services. In any event the focus of IOSCO, and any policy initiatives emanating from them, is on the single market. Therefore it is appropriate that they concentrate principally on the single market when conducting IA.

Whilst it is acknowledged that an evaluation of the impact of a proposal may be based on information obtained at the national level, IOSCO typically will not perform individual national analyses. Notwithstanding this, IOSCO will seek to be cognisant of significant national specificities, and expects that such specificities will be brought to the attention of them by, inter alia, member regulatory authorities and/or by national lobby groups.

In the course of conducting an IA it may become apparent that there are two or more distinctly different experiences observed within the single market. Without prejudice to its policy of not conducting national IAs, IOSCO will seek to fully reflect these different experiences in its approach to IA. In particular, IOSCO will have to be alive to the risk that focussing exclusively on the international dimension may mask the degree to which for example, negative effects in some jurisdictions are offset by positive effects in others or that for whatever reasons certain markets are local in nature.

1.9. WHEN IS A QUANTITATIVE AND WHEN IS A QUALITATIVE ANALYSIS NEEDED?

An IA should always be qualitative. Whether or not it also needs to include some quantitative analysis depends on the extent to which it is required in order to establish whether or not the overall effect of a policy proposal will be significantly positive.

For example, it will not make much sense to quantify one aspect of a policy (assuming that this aspect is relatively easy to quantify), when other aspects of the same policy are expected to generate much larger impacts which cannot be quantified.

Thus, not every aspect of a policy proposal needs to be quantified, only those that are expected to carry significant impacts or about which there is uncertainty in relation to the extent of their likely impact. Moreover, when the benefits of different policies are similar, it can indeed be enough to evaluate the costs of these policies in order to compare them.

There is sometimes a misperception that a quantitative analysis means that benefits and costs should be quantified as precisely as possible. This exposes a quantitative analysis to unnecessary criticism because it is frequently very difficult, if not impossible, to fulfil such a requirement. For practical policy purposes a much lighter requirement will often be sufficient. As regulators are interested in knowing whether the net benefit of a policy proposal is significantly positive, it will be enough to quantify an underestimation of the benefits and an overestimation of the costs. When the resulting net benefit is significantly positive, the policymaker can be reasonably sure that the proposal has passed an important IA test. In this case, there is no need to quantify benefits and costs in a very precise way.

In both qualitative and quantitative IAs it is important to carry out a stakeholder analysis (see also the IA questionnaire in Appendix 1).

1.10. ASSESSING THE BENEFITS, THE COSTS AND THE NET BENEFIT

Where regulatory policy proposals are expected to have significant effects upon market participants and consumers, an assessment of the associated costs and benefits of those proposals is required. From the outset it will be important to recognise that an evaluation of the costs and benefits will be comprised of at least five elements, namely:

1. the costs to regulated firms,
2. the costs to consumers,
3. the benefits to regulated firms,
4. the benefits to consumers, and
5. the costs to regulators and the impacts on firm/consumer behaviour.

Though it may be easier to ascribe monetary values to some of these elements than to others, a systematic analysis will require that at a minimum all costs and benefits are identified.

It may be helpful to think of the evaluation of costs and benefits in two steps. The first step consists in assessing the incremental costs and benefits, whereby the term incremental refers to the changes in costs and the changes in benefits which are triggered solely by the policy proposal and not by simultaneous changes in business practice that would have occurred anyway. This first step is key for the IA as it is sufficient to identify the most efficient policy among a range of alternative policy options. In the second step, the result obtained at step one may be compared to the status quo (in other words the "no change" scenario) in terms of net benefit to see whether the policy proposal would lead to a significant positive net benefit or whether, overall, inefficiency would still remain. It will often be helpful to evaluate the current level of compliance in order to get insight into the additional costs of a regulatory proposal with respect to current market practice.

> *Example: assume that a new European directive requires financial institutions to send financial statements for unexecuted orders to consumers. In an economy with 100 customer contacts each year, and a price of €1 per statement, the costs are not simply 100 x €1 = €100. To arrive at a realistic evaluation of the costs of this new regulation, it is important to establish how many companies already issue a statement and are therefore 'compliant'. If 98% of the firms already send a statement about the execution of an order, the cost of this directive is €2. Note that, if, for example for reasons of simplicity, 'zero compliance' (instead of 98%) were assumed, the costs of the rule would be considerably overestimated, and there would be the risk that a rule that is useful will not be introduced because its costs are considered too high.*

Evaluating the net impact of a proposed policy is probably easiest when a monetary value can be attached to the main costs and benefits generated. But much of the time, a quantitative assessment of the costs and the benefits of a policy will not be possible. Nevertheless, in such cases, a qualitative assessment will often allow policymakers to say something meaningful about the net benefit. Sometimes, though a quantitative (but non-monetary) assessment may be possible, it may not provide materially more information than a qualitative assessment. This is for example the case when it is difficult to aggregate the qualitative and (non monetary) quantitative assessments available. We have already explained in a previous section that one often does not need to be very precise in quantitative evaluations of costs and benefits, though this is by no means always going to be the case.

The need for discounting is explained in section 1.11.3.

Sometimes the term Cost-Benefit Analysis (CBA) is used to refer to the quantitative evaluation of the impact of a regulatory policy, and this is the meaning the present IA Guidelines give to CBA. But it might be worthwhile to stress that this is a semantic choice, and that others use the term CBA interchangeably with the term IA. However, this latter approach risks ignoring the critical "problem identification" step in the IA process.

Furthermore, it should be noted that a good IA will not be restricted to the assessment of the positive and negative effects of a policy proposal when there are strong distributional effects. This is particularly important when, as a result of a policy, one group of market participants would, for example, make a loss which is roughly equal to the benefits made by another group. Although the net impact would be overall broadly zero from a cost-benefit point of view, the regulator could face justified criticism about the policy in a public consultation, particularly should the disadvantaged group consist of consumers, whose protection regulators are typically charged with. It is therefore important that the IA includes an analysis of distributional issues when they are significant. The assessment of distributional issues is, however, often a very difficult matter and it is unlikely to be carried out on a systematic basis.

1.10.1. Assessing the costs of policy options

For the purpose of IA, it is useful to introduce distinctions between different types of costs.

Different implementation costs

A first distinction concerns costs which result from the implementation of a policy. These can be divided into three subcategories – two types of direct costs, and indirect costs - according to their effects.[2] These categories are:

- regulator's costs, i.e. the costs that arise to the regulator when it designs, monitors or enforces a regulatory policy (for example, the costs that a supervisor incurs in order to carry out its task);

- compliance costs, i.e. the costs incurred by regulated entities and persons in order to comply with regulatory policy (for example, the costs of setting up a new organisational structure or internal controls, new computer programs or systems, or training courses). Note that it is only the change in costs that firms incur due to proposed regulatory requirements that should be taken into account. That means excluding costs that firms incur as part of doing "business as usual". The latter costs would therefore not fall away in the event that the regulatory requirement was subsequently removed. It is important to establish a clear baseline against which to consider changes in firms' compliance costs. Ordinarily, this would be established with reference to the conduct of the typical or average firm in the relevant market (though this may not be possible in many markets). If existing regulatory requirements are being revised, it would be reasonable to measure cost changes relative to the minimum costs of complying with the original requirements (though taking account of the fact that such minimum requirements might differ for firms of different size, for example).

- indirect costs, which are the negative effects that a regulatory policy can have as a result of impacts it has on the behaviour of market participants. Indirect costs are usually divided further into the costs resulting from a change in the quantity, the quality and the variety of products sold, as well as a change in the effectiveness of competition (further details on indirect costs are given in the Appendix 3).

For the evaluation of the costs it is important to note that, when the regulator is financed by the regulated firms, the costs to the regulator are in fact borne by firms. Firms will normally – although this process can take time - pass on an increase in costs to consumers in the form of higher prices

[2] The comments here refer to the costs (and benefits) associated with individual policy proposals. It is usually not the purpose of IOSCO IA exercises to consider the broader question of the cumulative costs that a whole series of regulatory initiatives might have. Nevertheless, it may sometimes be appropriate for policymakers to consider issues such as the impact that simultaneous implementation of several initiatives might have (for example on the availability and therefore cost of IT consultants). The broader regulatory environment facing firms and other stakeholders should therefore be given due consideration.

(this is, however, an assumption that should be tested). This means that, in general, all costs will ultimately be borne by consumers or investors.

Fixed vs. variable costs and set-up costs vs. on-going costs

Two other distinctions are useful for IA. The first is between fixed and variable costs.

- Fixed costs are costs which do not vary with output. In the long run, all costs can be considered variable.

- Variable costs are costs which vary directly with the output. Variable costs are associated with productive work, and naturally rise and fall with business activity.

This distinction is different from another one: set-up costs vs. on-going costs.

- Set-up (or one-off) costs are costs which are incurred at the beginning of a project only.

- On-going costs are costs which are incurred again and again during a project or an investment. Usually set-up costs are very large in comparison to ongoing-costs each time the latter occur.

It is often important to make a distinction between fixed vs. variable costs and between set-up costs vs. ongoing costs when assessing regulators' costs, firms' compliance costs and/or the indirect costs of regulatory policies.

When it is not possible to evaluate the costs of a certain policy option, it might, however, be feasible to evaluate.the costs of the next best alternative policy option foregone or the profits foregone due to the adoption of new regulation. For example, it might be possible to evaluate the costs of an alternative policy with similar benefits which has been rejected. The costs of this alternative policy would then give a ceiling for the costs of the policy chosen.

1.10.2. Assessing the benefits of policy options

When assessing the impact of a policy proposal it will usually be easier to assess costs than benefits – particularly as far as their monetary value is concerned. However, accurate identification of policy benefits, which requires accurate identification of the problem being addressed, can markedly enhance the credibility of the policymaking process. A number of techniques exist – to be applied on a case-by-case basis - which can help policymakers to evaluate benefits even when it seems impossible at first. The following techniques can be used to evaluate benefits:

- Comparison to a relevant historical case

  In many cases, an incident or a series of incidents over time will be part of the reason to regulate. In order to make an estimate of the expected benefits, the losses in a number of historical cases can be used as an indicator for how much of the loss could have been prevented through the proposed regulation.

- Evaluation by a proxy

  This approach uses observable variables which are linked to the unobservable variable - e.g. when there exists a known dependence structure - or focuses on simulations of the unobservable variable.

- Use of a break-even approach

  The third possible approach is what can be called the break-even approach. This approach consists of calculating the amount of benefit needed - for example a reduction in loss needed - to cover the costs incurred, which are quantifiable. With this approach, the loss prevention is separated into the risk of loss and the extent of loss which allows one to capture the impact on the market. The potential loss for each market participant and the risk that a market participant will actually suffer loss are then estimated. It will then be possible to determine by how much the loss, risk of loss or a combination of these elements needs to be reduced in order to cover the costs of regulations and supervision. For this break-even assumption, one can examine whether this would be a realistic expectation. The impact of incidents can often be estimated with the help of event studies. The significance of the impact of incidents can be calculated and an estimate of the extent can be given. To summarise, in the break-even approach, one calculates by how much the risk and/or the impact of an incident must be reduced in order to cover the costs.

- Preparing a survey

  The 'beneficiaries' of the regulation may be asked what they are prepared to pay for the supervision. One could think, for example, of market research among investors, asking them what monetary value they attach to an information leaflet, or the extra supervision on individual parties as agents and intermediaries. Indirectly, it is the end user who pays, as the costs are passed on. It is these end users who benefit from the regulation and supervision. The value that rules generate for the end user is an estimate of whether the costs are justified. It must however be kept in mind that the declarations in surveys may over- or

understate the real preferences and that care must be taken to ensure that survey questions are properly framed.

1.10.3. Discounting the costs, the benefits and the net benefit

If quantitative estimates for both costs and benefits are available, costs and benefits that arise at different times should be treated differently. The monetary value of $100,000 received today does not have the same value as $100,000 received in ten years time, for example[3]. To make the IA sensitive to time value, discounting is used.

The discounted impact of a policy option can be evaluated by calculating what is called its present value (PV)[4]. Discounting allows one to quantify the fact that a given amount of cost (benefit) that arises later (sooner) is preferable to the same amount of cost (benefits) that arises sooner (later).

The net present value (*NPV*) of a policy proposal is calculated as

(Discounted value of benefits) – (Discounted value of costs).

In practice, the discount rates used will, in the absence of realistic alternatives, correspond to a long-run average of the real or nominal yield on long-term government debt. Real or nominal discount rates should be used when the costs and benefits are measured in real or nominal terms respectively. The real discount rate can be obtained by subtracting expected inflation from the nominal rate.

In a qualitative assessment, discounting may be considered unsuitable, since costs are not expressed in monetary terms. But even in a qualitative impact assessment, the influence of time should be taken into account. One way to do this is to make a rough distinction between two or three broad time periods where the costs or the benefits occur (see the IA Summary Tables in section E for an example).

Neglecting the issue of discounting can lead to serious anomalies. For example, failing to discount the minimal annual benefit (cost) of a policy which only necessitates a huge set-up cost (generates a benefit at only one point in time, but a substantial one) gives rise to an infinite discounted present benefit (cost). Another anomaly is that by not discounting, it would always be preferable to defer a policy if the same policy will be available in the future. Indeed, when the money which would have

[3] The appendix shows a graph of the value today of € 100.000 received in x years for a range of discount rates.

[4] For example, to calculate the present value of a cost C that occurs t years in the future with r as discount rate, the following formula can be used: $PV[C] = \frac{C}{(1+r)^t}$. For a benefit B, the calculation is the same (C must be replaced by B).

to be spent for the policy is used for an investment with a positive return, this investment would be preferable to the policy as more money would be available for the same policy in the future.

One needs to be careful when policies with different time horizons are compared as a comparison between *NPV*s might be misleading. In such a situation, it is often useful to calculate the annualised value for each of the alternative policies.

1.10.4. Risk and uncertainty

The outcome of an IA often will depend on predictions which by nature will have a degree of uncertainty attached to them. IA should, whenever this is reasonably possible, take the uncertainty explicitly into account. Two basic techniques will help policymakers to do this:

- Simulations
  Sensitivity analysis involves considering a range of possible values of one key variable or factor which is likely to affect the outcome of the regulations; obviously this technique can also be applied to several (but, in practice, because of increasing complexity, not many) factors at the same time;

- Boundary analysis
  This technique consists of placing upper/lower bounds on the costs and/or benefits.

1.11. COMPARING POLICY OPTIONS

Experience has shown that in many cases, high-level comparison of policy options is enough not only to dismiss some options but also to identify the most proportionate policy option in terms of benefits and costs.

If high-level comparison of costs and benefits is inconclusive, a detailed consideration of alternative policy options should involve a comparison of the benefits, the costs, and the net benefit (i.e. benefits minus costs) they generate. However, in many cases a precise quantitative evaluation will not be possible. In many - perhaps even most - cases, it will, however, only be possible to compare options in a qualitative manner. Often alternative policy options can be compared by evaluating their costs only. Obviously, identifying the best option in this way works is appropriate only when the benefits of the policies under consideration are identical or very similar.

For example, if policy A would reduce insider trading by much more than policy B, and policy A would also cost more than policy B, information about the costs and the benefits would be needed for a comparison of the two policies. However, when both policies would reduce insider trading in roughly the same way, and only the costs would be different, a comparison of the costs alone would allow one to choose the more efficient policy.

The process of comparing policy options may lead to the identification of a single, preferred option. However, it might also lead to the proposal of several policy options, whose comparative advantages and disadvantages would need to be described clearly. It should be borne in mind that the purpose of IA is to identify sensible policy proposals for decision makers and to help them making decisions, not to substitute for the decision-making process.

2. WHAT TO DO FOR CONSULTATION

Consultation is a key part of policy-making as well as of impact assessment. It refers to every direct and indirect attempt to collect input from relevant and interested parties during the policy-making process. It may therefore cover the department-to-department consultation within a Competent Authority, meetings between policy-makers and market participants and consumer representatives, scientific advice from experts, or written formal consultation with other public or private authorities, market participants and/or their representatives, consumer representatives, and individuals.

2.1. THE PRACTICE OF CONSULTATION BY IOSCO

IOSCO Principle to the Regulator A.4 states that "[t]he regulator should adopt clear and consistent regulatory processes". Effective consultation processes are a key element to implement this principle.

IOSCO Committees use appropriate processes to consult - both ex-ante and ex-post - market participants, consumers and end-users which may include amongst others: concept releases, calls for evidence, publication of consultation papers, public hearings and roundtables, written and internet consultations, public disclosure and summary of comments, feedback statements, national- and/or international-focused consultations.

2.2. THE ROLE OF IA IN THE IOSCO CONSULTATION PROCESS

2.2.1. Pre-Consultation Paper period

During the period that precedes the release of the first Consultation Paper, assuming there is only one consultation round (or the second Consultation Paper if there are two consultation rounds), informal consultation with stakeholders in order to collect information and/or data on the problem at hand can be a helpful tool. It will, for example, contribute to a better assessment of whether the problem is significant and, if it is and there is no prospect of a market-based solution, the proposed solutions would actually be appropriate. It may be important to involve market participants at an early stage of the IA. Concerning the collection of data, a key role may be played by trade

associations. It is important to handle sensitive information appropriately and to report data in ways that preserve confidentiality.

2.2.2. Post-Consultation Paper period

The Consultation Paper released to the public should report on the IA work of the proposed policy options. The paper should be evaluated as a single piece of work, although technical issues concerning IA aspects may require relevant experts to evaluate the responses.

During the post-CP period, the standard IOSCO consultation procedures apply, as these are defined in their public statements of consultation practices. In particular, the feedback statement to the comments received will refer to IA when this is appropriate.

2.2.3. Preparing a Feedback Statement that refers to IA

The aim of a Feedback Statement is to give an overview of the main substantive points arising from the consultation and to explain the rationale for selection of particular policy options.

A Feedback Statement that refers to an IA could be organised along the following lines:

- The Feedback Statement could start with a brief outline of the reasons for consulting and the methods used, remind the reader of the main issues involved, and usually restate the questions of the Consultation Report.

- It could contain a summary of responses, which should properly represent all the main comments received. It does not have to contain every individual response, a summary of the responses received is sufficient. However, disclosing individual responses might be considered when appropriate.

- In case the draft policy proposal is reviewed and modified in light of the responses received, the reasons for the changes should be given. Similarly, when the draft policy proposal is not modified as a result of the comments received, this should be explained. In other words, the rationale for rejecting or accepting received suggestions should always be made clear.

- The Feedback Statement should conclude with a summary of the policy decision and a description of the way the policy will be taken forward.

- The report should contain an appendix with the list of respondents.

3. KEEPING POLICIES UNDER REVIEW

3.1. WHEN TO REVIEW POLICIES?

It is important to ensure that a policy proposal that has been adopted is properly implemented to achieve its objectives. To make sure this happens, it is appropriate to keep the policy under review. This is in line with IOSCO Principle on Securities Regulation A.7 states that "The Regulator should have or contribute to a process to review the perimeter of regulation regularly."

Here again it is important to be proportionate. Some policies might not need any review because their effects are obvious and certain. In other cases, the likely impact of the policy may be uncertain but potentially significant, and in such circumstances a date for a review, i.e. an ex-post IA, ought to be included in the policy proposal. During the ex-post review process, consultation with all interested parties is essential and should be used in the same way as during the ex-ante IA process.

3.2. WHEN TO PREPARE AN EX-POST IA?

An ex post IA aims to review existing policies and to evaluate their effectiveness. It can be conducted whether or not a review date has explicitly been set. The preparation of ex-post IAs provides legitimacy vis-à-vis the public and internal discipline and therefore serves to underpin the credibility and accountability of the IOSCO work. Moreover, where it is known that there will be an ex-post IA, the discipline of policy-making is likely to be enhanced.

As mentioned above, an ex-post IA should be carried out when there is uncertainty about the likely effects of a policy and where those effects are expected to be significant. In such cases, the ex-ante IA will probably have included a pre-commitment to conduct ex-post IA. However, such analysis can also be conducted with policy-maker discretion where, for example, there is a reasonable presumption that a particular policy has not achieved the desired objective or when it does so but at an unexpectedly high cost, so that the net benefit of the policy might not be significantly positive (regulatory failure).

In an ex-post IA, the IA methodology should be applied in just the same way, even if the focus of the exercise is somewhat different. For example, in the case of an ex-post evaluation, policy makers

would not need to devote much attention to conducting MFA/RFA if it had been done in the first place. Where a regulatory intervention proceeded in the absence of MFA/RFA, then any ex-post evaluation would need to address this shortcoming and the IA exercise would more closely resemble the established ex-ante approach.

Assessment of the impacts of past regulation is also important because it must bear heavily on the design and implementation of a regulatory response to a present problem:

- One may wish simply to remove pieces of regulation that are the cause of problems (unless doing so would result in a still bigger risk/detriment);

- One would presumably wish to steer clear of measures similar to ones that have definitely failed in the past, and to be clear about the reasons why they failed (did they or did they not correctly target the relevant market failure?);

- One would need to decide whether existing regulation that seemed to be correctly targeted on a market failure should be given more time to work.

Care must however be taken about some extra difficulties when assessing a policy ex-post instead of ex-ante.

The first difficulty is the proof of the causality between the policy measure and the change in behaviour. To prove causality, ideally, a comparison should be made between the market with and the market without regulation/supervision. This can involve the use of complicated analytical tools, requiring input from technical specialists, and is not always feasible. Moreover, in some fields of regulation and supervision the problem of dark figures or dark numbers is prevalent, i.e. neither the scale nor the exact form of the illegal conduct is known (e.g. insider trading).

In the absence of a proof of causation between a policy measure and market outcomes, it may still be possible to identify indications of the effectiveness of regulation and supervision. To this end the following three instruments have proved useful:

- Anecdotal evidence:
  Gathering anecdotal evidence by interviewing stakeholders can indicate whether or not a particular policy has addressed a market failure. Obviously the larger the volume of relevant evidence collected the more credible the results. However, one has to be aware that this method is vulnerable to strategic answering and diffusion between perception and facts.

- Outcome indicators:
  To improve the effectiveness of policies, and of regulation in general, it is useful to develop a structure of performance indicators. Outcome indicators show to what extent a certain policy has helped to achieve the aims that have been identified ex-ante. Such outcome indicators have to be measurable and achievable, which is not easy, especially when they are developed for less tangible objectives such as market confidence. The structure of such indicators should be developed before the implementation of the policy and used in the monitoring process and in any ex-post analysis.

- Statistical studies:
  Once a regulation has been implemented and data is available that spans the period before and after implementation, statistical techniques, such as regression analysis, can be used to test hypotheses about the nature and extent of the impact of the regulation. Such exercises face technical difficulties, such as how to isolate the effects of regulation from the effects of other explanatory factors. Nevertheless, they can prove of considerable value in clarifying the significance or materiality of regulatory impacts post-implementation.

APPENDIX 1 – INDICATIVE IA QUESTIONNAIRE

The intention of this section is to provide policy-makers with a series of questions the answers to which will help them to frame the scope and nature of the policy issue under investigation. The questions are not exhaustive, they could be grouped together differently, and not all of them will be relevant to the problem at hand. The questions are only examples of the kind of issues policy-makers may want to investigate. It is anticipated that IA experts will help policy-makers to identify the questions most pertinent to the policy issue under investigation from an IA point of view.

1. Preliminary General Questions	
Market participant and stakeholder identification	• Which stakeholder groups / market participants are within the scope of the policy issue under consideration? In addition to retail and wholesale consumers and product / service providers, other interested parties will include industry and consumer interest groups, trades unions, other governmental institutions, and elements of the media
Scope and nature of considered regulatory measure(s)	• What is the nature of the problem and what type of regulatory solution is envisaged? • What is the nature of the regulatory solution envisaged? (eg is it EU or internationally-driven regulation? Will it be implemented into national law with broad discretion? Is it industry-led best practice?) • Has there been a previous regulatory intervention (and how recently was it introduced) and what evidence is there to indicate its effectiveness? • Would self-regulation be effective? Or would it fail to address the problem and stifle competition?
IA scope	• Are the costs and/or benefits of the regulatory solution expected to be significant? What does this imply for the scope of IA work required to examine the problem and potential solutions in more detail? Ultimately the IA must yield information that is sufficient to inform the decision-making process

2. Stakeholder impacts (covering the various types of market participants and stakeholders)	
2.1. Consumers and their representatives (investor groups and associations) **–**with a clear distinction between retail and wholesale consumers	
Consumer benefits	• How will consumers benefit from the policy proposal? • What assumptions about consumer behaviour underpin your considerations? (for example, for consumers to benefit from disclosures concerning commission rates you have to assume that disclosures are read, understood and behaviour modified in a way that leads to a better outcome (i.e. lower mis-selling))
Consumer costs	• What is the impact of policy proposals on the costs borne by consumers? Will industry costs be passed on to consumers? • Do you expect product prices to change? Will product choice or quality be affected?
Financial literacy / capability	• Consider the financial capabilities of consumers and the role that market participants do and can play in affecting capability or in addressing any shortcomings

2.2. Product / service providers	
Benefits to firms	• Market and regulatory failure analysis will help identify the nature of potential benefits, which can be linked to regulatory objectives eg financial stability, market confidence. Will benefits arise in terms of greater product sales? Or will firms financial strength improve? Or their cost of capital fall? • Will firms' incentives be better aligned with those of their customers?
Costs to firms	• What sort of compliance costs (one-off and ongoing) will be incurred by firms? • How will the policy initiative affect their behaviour? Will it affect product price, choice, quantity or quality? What sort of administrative costs might be involved? How will the policy be enforced? Will it require constant and therefore potentially costly monitoring, or not?
Organisation and governance	• Will there be organisational and corporate governance changes (new requirements, etc.) as a result of the policy?
2.3. Macroeconomic consequences	
Industry	• What will the industry-wide impacts be? • Will businesses relocate? What might the employment consequences be?
Economic growth	• What are the likely economy-wide and/or global impacts on economic activity? For example, will there be single market harmonisation benefits or will national or EU-wide competitiveness be compromised?
Transfers of resources	• Will there be impacts on potential transfers of capital and human resources across sectors and borders?

3. Market failures and market impacts (see Appendix 2 for definitions and examples of market failures)	
Market failure analysis	**Key questions:** • Is there a significant market failure that relates to a regulatory objective? • Is there a significant regulatory failure that relates to a regulatory objective? • In the absence of intervention will the market (regulatory) failure be corrected in the short term?
Market definition and structure	• What is the relevant economic market? • How is it structured? • Is the market pan-European, or a series of local or national markets? • If the market is not or is only partially integrated, what might be the barriers to further integration and can they be removed through regulation?
Identifying and addressing market failures – imperfect and asymmetric information	• What types of information flow are important in the market? • How well informed are consumers relative to providers? • If they are less well informed, what might be the cause and implications of this? • Is there evidence of significant mis-buying or mis-selling? • Is there a significant problem of imperfect or asymmetric information? • If a policy initiative is designed to address an informational asymmetry what assumptions have to hold for benefits to be realised? • How will these assumptions be tested? • If an initiative has already been implemented, what evidence is there to suggest that it is working and that benefits are being realised? • Or is there evidence of a regulatory failure • What other impacts will the initiative have on firm and consumer behaviour?
Identifying and addressing market failures - externalities	• How well do individual firm incentives align with regulatory objectives? • How do firms' incentives change over the economic cycle? • Is there evidence of a significant externality? • If a policy initiative is designed to address an externality what assumptions have to hold for benefits to be realised? • How will these assumptions be tested?

	• If an initiative has already been implemented, what evidence is there to suggest that it is working and that benefits are being realised? • Or is there evidence of a regulatory failure? • What other impacts will the initiative have on firm and consumer behaviour?
Identifying and addressing market failures – market power	• Is there evidence to indicate the existence of market power? • Is there evidence to suggest that there is an abuse of market power? • If a policy initiative is designed to address an abuse of market power what assumptions have to hold for benefits to be realised? • How will these assumptions be tested? • If an initiative has already been implemented, what evidence is there to suggest that it is working and that benefits are being realised? Or is there evidence of a regulatory failure? • What other impacts will the initiative have on firm and consumer behaviour?
Regulatory failures	• Has an existing regulatory intervention resulted in higher costs or lower benefits than anticipated such that the net effect has been harmful or less beneficial than it could have been? • Is the intervention responsible for misleading consumers and further mis-buying? • Is the intervention responsible for reducing competition and pushing up prices? • Has a proportion of the firms in the market be forced to exit as a result of the intervention? Is the number of firms left in the market insufficient for competition to be effective? • Has the initiative reduced the competitive position of small enterprises relative to large ones?

4. Impacts on Regulators (incl. all governmental units involved in the regulatory process)	
4.1. Impact on the financing of regulators	
Operating costs	• Will the proposal affect operating costs for regulators? (consider possible impacts on staff, training and infrastructure requirements) Are costs one-off or recurring?
Funding and budget	• Will the proposal affect regulator's funding level, sources and composition? • Will there be any implications for regulators' budgets?
4.2. Impact on regulatory responsibilities	
Regulatory roles and responsibilities	• Does the policy initiative address problems relating to overlapping or uncertain regulatory responsibilities? • Will the proposal clarify the role of regulators with regard to a specific person, activity or operation? • Will it grant new regulatory powers to regulators or any other party? • What about the legitimacy of new powers, or power transfer (considering also the role of the media)?
4.3. Procedures	
Operational impact	• Will the policy initiative simplify internal processes and paperwork? • Will it affect customer service standards (e.g. licensing or authorisation procedures)?
Organisational impact	• What are the impacts: - on discretionary powers granted to regulators. - on regulatory processes (notably regarding administrative complexity? - in terms of a shift from ex-ante/rules-based to ex-post/principle-based regulation? - on specialisation and capacity of staff to address complex issues and deal with innovation (both from an operational point of view and with regard to research and analytical capacities)?
Regulatory simplification	• Will it avoid/reduce duplication in legislation and the regulatory framework?

APPENDIX 2 – MARKET FAILURES

This appendix will explain in more detail the concept of market failure and the different market failures which typically arise in the area of financial regulation.

If markets for all goods and services produced in positive quantities work well, each good or service will be priced at a level that matches (i) marginal benefit, measured in money, and (ii) marginal cost. Market failure arises when marginal benefit is unequal to marginal cost – too little or too much is bought and overall welfare is not at a level where it could be.

In broad terms, the four market failures that matter most in this guide arise when:

- externality/third party effects make social marginal benefit (or cost) differ from the "private" marginal benefit for buyer (cost to seller);
- some buyers (or sellers) are imperfectly informed, so that their mistaken estimates of actual marginal benefit (marginal cost) lead them to take incorrect decisions;
- market power or lack of competition, on the part of seller(s) or buyer(s), leads them to exploit their influence over the price, which they no longer take as given – leading, typically, to under-provision of the good in question;
- "public goods" from which everybody profits and which can be difficult to provide when the market is left on its own.

More detail on each of these is supplied in turn below.

Externalities. A good or service generates externalities if its production or consumption affects the welfare of economic agents (people or firms!) other than its original producers or consumers without prices reflecting such effects. Externalities may be negative and/or positive. They are "negative" for those on whom they impose costs and "positive" for those who gain from them. Negative externalities occur in production when decisions adopted do not take account of all the costs which result from the firm's actions but which are not borne by the firm.

> *A good example is the failure of the derivatives dealer Enron Corporation in December of 2001 which exposed the practice of using OTC derivatives to hide debts or losses, and artificially boost income. It revealed that collateralizing OTC derivatives might be inadequate as a risk mitigation device. Enron's*

failure showed how a bankruptcy can have a sever impact beyond the immediate creditors and cause sharp declines in the market capitalization not only in the energy sector, but the overall U.S. equity market. One reason was that investors were – in the face of intransparent trading markets – compelled to presume that almost any firm had a potentially large exposure to Enron. In response, many firms voluntarily announced their losses to Enron because they feared that the market's expectation would by far overestimate the true losses.

Consumer fraud may be regarded as a negative externality in consumption. Financial crime also bears negative externalities in terms of the costs people incur in defending themselves against it and in being involuntarily associated with it.

Imperfect and asymmetric information. Individual decisions are affected by imperfect information about quality (that can be unobservable ex-ante), price (information on which can be very costly to obtain) and the future (data on which can be unavailable!).[5] Information asymmetries exist when one party to a financial transaction has more or better information than the other party and exploits its informational advantage. Excessive costs of accessing information, for example, may give rise to this market failure.

Some financial products (or the firms supplying them) may be so complex that disclosure, by itself, cannot enable customers to make informed choices. In financial services, the outcome of a contract may depend on the provider's financial soundness and competence for decades into the future (like for example in the case of life insurance contracts). This information cannot be known at the point of purchase.

Information asymmetry can work both ways. A product provider may be selective about the information that it gives the consumer: it prefers not to reveal information that puts the product in a bad light. Equally, a purchaser of life insurance may not disclose that he or she has health problems. An important area in which information asymmetry may explain the market outcomes that we observe is where one party to a transaction (the principal) uses an agent to act on his/her behalf. The principal aims to sign a contract that aligns the agent's interests to his/her own. But it can be hard for the principal to monitor the agent (an information problem) and the agent may have incentives to take specific decisions that are not aligned with principal's interests.

[5] It is a "fact of life" that markets fail to provide information that cannot be known. This type of market imperfection is not a market failure – there is no asymmetry and nothing that can be done – and so does **not** provide a rationale for regulatory intervention (beyond warning those who may not be aware of the information gap that it cannot be filled).

An important example is when a consumer (principal) uses a financial advisor (agent) who is remunerated through commission paid by the product provider. Another example is when the consumer (principal) uses a fund manager (agent) to invest his or her funds.

It is sometimes useful to classify products according to the nature of the informational problem linked to them[6]:

- "search goods", where the products are typically homogeneous, their the quality is known ex ante and consumers/investors are "searching" for the lowest price;
- "experience goods", where the products are typically heterogeneous (i.e. the price depends on the quantity and the quality), and their quality becomes known ex post, i.e. after the product has been purchased;
- "credence goods", where the quality may never be discovered, even after the product has been purchased. The consumer/investor has to have faith into the judgement and competence of the product provider.

Financial products are often, but not always, similar to credence goods. This may be obvious in the case of a life insurance contract for example, but it may also be true for other apparently standardised products like company shares, financial futures or vanilla-type options. Indeed, the value of the share may depend critically on the corporate governance structure, the possibility to enforce voting rights and the quality of the management. Similarly, the value of the future or the option depends on the quality of money management.

Two forms of asymmetric information can be distinguished depending on the exact timing at which the information asymmetry occurs, i.e. before the transactions' contract is signed (so-called "adverse selection") or afterwards (so-called "moral hazard").

An example of the first situation, adverse selection, is when the seller of a financial product may have private information about the quality of a product at the time of contract. In banking, an example would be a depositor putting funds with a bank offering high saving rates without being aware, for example because of misleading information, that the bank is also high-risk. An example in insurance is that customers who apply for an insurance policy are more likely to be those most in need for insurance.

An example of the second situation, moral hazard, is when the buyer of a financial service may not be able to assess the quality of the service after conclusion of the contract. Another example would be

[6] In line with standard terminology in what follows the term "good" is used instead of "product". The classification can easeliy be transposed to finanical products.

when bank, insurance or investment firm managers are inadequately monitored by shareholders, because the business strategies chosen by the managers may be more risky than the shareholders would accept. This problem is likely to be particularly relevant when the managers can profit from the upside of the business strategy, but it is mainly the shareholders who are affected from a downside movement. In other words, as a result of moral hazard, the business strategies may be more focussed on the private benefits of the managers (like prestige, empire building, etc.) than on maximising profits and dividends.

In the context of financial market regulation, the distinction between the two forms of asymmetric information may be needed since the means of regulation to address these problems may differ, as well. While in the former situation it may be appropriate to stipulate certain disclosure requirements, in the latter situation, a regulatory measure could define the liability of the service provider.

Market power is exercised when prices are changed solely by the decision of one or a few market players: prices are set by these firms with limited regard to customers or competitors, such that revenues above the marginal cost of all production inputs (including the market cost of capital) can persist rather than be eroded by competitive pressures. In other words, there are, in contrast to a situation of perfect competition, excess profits. Market power can arise if firms collude and agree on a price strategy or if there is de facto collusion – which may be tacit in nature. Market power is also exercised through the use of brands, when prices and costs are not really interlinked (the brand premium may far exceed the cost of creating the brand). It can also result from consumer inability to discipline producers, probably due to information asymmetries, so that a false competitive focal point may drive transactions.

For example, one effect of "fit and proper" requirements, conduct of business requirements or prudential requirements is to create an entry barrier that reduces the strength of competitive pressures.

There is also the case of natural monopoly. This arises where sunk costs are very large relative to unit production costs, so that average costs are decreasing for any volume of production for which there is demand. If there are these economies of scale in production or there are network economies in distribution, a single producer or distributor seems the most efficient means of satisfying all demand. Aside from huge sunk costs acting as a barrier to entry giving rise to natural monopoly, non-natural monopoly may be created by other barriers such as regulation.

Market power is often, but not always, reigned back in contestable markets by the threat of potential entrants.

"Public goods"[7] as opposed to "private goods" have two particular characteristics: First, no additional cost has to be incurred in order for an individual to benefit from consumption of the product, i.e. there is no rivalry between market participants for its consumption. Secondly, it is impossible or at least very difficult to exclude individuals to benefit from such products.

> *An example of a public good in the context of financial markets is financial stability. Every market participant benefits from financial stability and the "provision" of this "good" for an additional market participant is basically costless. In other words, if the financial market is stable, every market participant can benefit from this situation without affecting the ability of others to benefit from stability. In this context, the monitoring of the solvency of banks, (re)insurance companies and other financial firms who are systemic in nature can be considered to be a public good as the financial health of these firms is a precondition of financial stability.*

Regarding the provision of public goods, the market mechanism in general fails to generate an efficient outcome and produces too little of the public good. Because the market will not supply or will supply too little of it, public goods may provide a rationale for government activity.

> *In the example of financial stability, this would correspond to a situation where, if the market were left to decide on its own about the measures taken to promote financial stability, it would not take up all steps necessary to efficiently achieve a stable situation.*

The reason for this sort of market failure is that the producer of the public good does include into its business strategy that the good will also benefit other market participants. Moreover, every market participant will anticipate benefits from the provision of other market participants for free. In other words, they will free ride. This reduces the individual incentive to incur the cost of production.

Preserving stability in the financial markets is one of the main objectives of financial regulators. Regulatory intervention is warranted since following the reasoning described above private action does not in general necessitate maintaining market stability and may often have incentives conflicting with it.

> *The provision of generic information about financial products can be seen as a public good. There is a demand from consumers for such information, but it may not be worthwhile for any one firm to expend significant resources in providing it, because much of the benefit would accrue to its competitors. The result is that the market – if left to its own devices – does not provide as much generic information as consumers would be willing to pay for.*

[7] "Good" is here used as a generic word for product. The term good is used here because it is commonly used in the context of this type of market failure.

APPENDIX 3 – DIFFERENT TYPES OF COSTS

This appendix provides more details about the types of costs alluded to in the main text of these IA Guidelines: direct costs (i.e. regulator's costs and compliance costs), and indirect costs (such as a change in the quantity, the quality, or the variety of financial products offered, or a change in the effectiveness of competition).

Regulators' costs

A new regulation usually leads to additional costs to the regulator in the area of designing, monitoring, and the enforcement of policy. For example, the time spent by regulatory staff or the money spent on required computer hardware or software falls in this category. In some complex and broad regulatory proposals time spent and other costs for preparing drafts as well as designing the regulatory regime should be considered part of regulators' direct costs.

Direct costs are often easy to measure, both quantitatively and in monetary terms, since the information needed is available within the regulatory authority.

Compared to other costs, direct costs are generally easy to quantify and monetise, but they are often also negligible within the overall costs of a policy. In such a situation, it is not always proportionate to evaluate the direct costs in a very precise manner – or even to evaluate it at all.

Compliance costs

Compliance costs correspond to the value of resources used by regulated entities or individuals in order to comply with regulation. In general, new regulations will increase compliance costs – but this need not be the case, e.g. when the aim of new regulation is to reduce bureaucracy and paperwork within regulated firms.

In the assessment of compliance costs, consultation with affected parties has an important role to play. When information obtained in this way is used in the IA, special attention should be given to

- the tendency of affected parties to overestimate the costs they incur; often it is possible to overcome this problem at least to a degree by surveys where affected parties are unlikely to respond in a co-ordinated way;

- new ways to comply with the regulatory requirements; for example, by using electronic transmission in a standard format, compliance with data requirements can be made relatively costless.

Some examples of compliance costs are listed in the table below, which makes a distinction between one-off and on-going costs. In general, when regulation is withdrawn, firms will not bear any more on-going costs (i.e. the fixed and the variable costs), which were linked to the policy, but they have already incurred one-off costs (or set-up costs) in an irreversible way in order to comply with it. It is therefore important to think about the relative weight of on-going costs and one-off costs when new regulatory policies are proposed.

Table A.1: Examples of compliance costs

One-off costs	1. Information costs and training costs arising from knowing and understanding the new regulatory requirement; 2. Upgrading or changing equipment buildings, software, hardware etc.; 3. Buying or subcontracting specialist services (e.g. accounting, IT, legal etc.)
On-going costs	1. Individual or staff costs or time; 2. Inspection fees/ enforcement; 3. Licence application process (application form, writing letters, running advertisements etc.); 4. Form filling /administration / paperwork (compiling necessary information, time taken etc.)

Indirect costs

This section deals with the negative impact of a regulation on the market. These costs often are not obvious and may well be high when compared to other costs. Indirect costs are also often hard to quantify and monetize, and in many cases, a qualitative assessments will be sufficient in an impact assessment. Usually indirect costs are considered to be : changes in the quantity, the quality, and the variety of products or services offered, as well as changes in the effectiveness of competition in the relevant market.

Quantity of the product offered

Sometimes regulation can influence the quantity of a product offered. The concept of consumer surplus can be helpful to assess the impact of the regulatory policy. Consumer surplus is the excess amount consumers would be willing to pay for a product over the amount they have to pay for it. Consider, for example, an increase in compliance costs which is reflected in a price increase. This will affect the consumer surplus in two ways. For consumers who continue to purchase the product

after this price increase, there is a loss in surplus. Other consumers will, as a result of the price increase, stop purchasing the product. For them, the surplus will be negative.

Quality of the products offered

In markets where the quality of a product is difficult to ascertain, there is a tendency that products are cheap and of low quality, even though most suppliers and consumers would be interested in expensive and high quality products. Many regulations are designed to overcome the asymmetry of information which leads to this kind of market failure.

Conducting surveys on consumer preferences focusing on the willingness to pay for new regulation may sometimes be a suitable tool to measure the costs incurred by the low quality of products.

Variety of the products offered

By influencing the cost of specific products within a general class, regulation contributes to determine the variety of the products offered within that class.

As a general rule, it is safe to assume that an increase (decrease) in choice generates a benefit (cost) to consumers. This needs however not always be true. For example, when there are so many differences between products that consumers cannot compare them, there is likely to be a loss for consumers as the product suppliers will fix the prices higher than would be the case when comparison were possible. Measuring the value of the benefit and cost as a result of change in the variety of products is often very difficult. Sometimes the extent of the change in variety of products can be used to decide between several policy options.

Efficiency of competition

Competition is a process which pushes firms to decrease the prices and to increase the quality of their products, where those who perform better drive out those who perform less well, and where the entrepreneurial spirit can unfold. It might be tempting to identify competition with rivalry, i.e. a process where competitors try to outperform each other. However, such a definition would not convey with any precision how much rivalry is good. Effective competition can be defined as a situation where firms do not make any excess profit (which is not necessarily the case under rivalry).

Regulatory policies may effect competition in various ways. For example, regulation concerning the process of becoming authorised may reduce or erect a barrier to entry and therefore increase or decrease competition. Imposing high level of fixed costs or limiting activities to some institutions or individuals may result in a decline in the number of competing firms or individuals.

In order to analyse competition issues it is often helpful to consider what is called the relevant market. The relevant economic market(s) can be identified by analysing which of the products affected are close substitutes for each other. Where they are not obviously close substitutes, the safer course is to assume that they are in separate markets.

The IA questionnaire (in appendix 1) presents a number of questions which might be helpful to identify and analyze competition issues related to regulatory policies.

APPENDIX 4 – TECHNIQUES FOR ASSESSING BENEFITS

The purpose of this appendix is to illustrate the techniques briefly explained in the main text by the means of examples.

- Comparison to a relevant historical case (losses of historical as indicator for how much of the loss could have been prevented through the proposed regulation).

  A miss-selling scandal, which is supposed to have had an exceptional strong impact on investors, might serve as an example. In this case, the loss can be estimated through the lost contribution and the remaining debt of the victims. The actual loss that could have been prevented through better regulations and better supervision, however, is less than this. In order to calculate the actual loss, one has to estimate the percentage of miss-selling. As the incident had been exceptionally strong, to calculate an annual benefit, the assumption can be made that such an incident would only occur once every ten years without regulation. This produces the following estimate of the average annual loss that could be prevented, and therefore the annual benefit:

  - *Number of victims: 92,044*
  - *Loss per victim: €15,283 (survey)*
  - *Percentage of miss-selling: 52%. These are people who have stated that when entering into the deal:*
    - *they did not know they were investing with borrowed funds, and*
    - *they did not know that they could lose their deposit or could be left with a debt, and*
    - *they were not given any comparison of their financial situation and resources with the product sold.*
  - *Annual benefits: € 74 million (92,044 x 15,283 x 0.528 x 0.1).*

An example from the supervision of auditors is the fall in stock market prices of other clients of Enron auditor Arthur Andersen, after it had admitted to destroying a substantial number of Enron documents.

- Evaluation by a proxy (observable variables which are linked to the unobservable variable)

  Example: The differences in mortgage rates, under conditions that are otherwise comparable, cannot be easily explained. The fact that certain mortgages are still sold despite these differences can often be explained (e.g. by a minimum processing backlog, so that the mortgage is certain to be executed on time). However, in a number of cases, this would not happen if there would be a rule which protects the client when (s)he states that the interest rate is an important decision criterion for him/her. In these cases, an advice that suits the wishes and profile of the client would lead, for example, to lower interest charges. An estimate of the percentage that further improved advice receives, multiplied with the number of decreasing interest instalments per annum, multiplied by the value of the advice improvement, provides an estimate of the annual benefits. In concrete terms:

  - *3.3 million households have a mortgage, i.e. there is an average debt of €106,000;*
  - *Percentage of miss-selling is estimated at between 5% and 30%: 10% assumed;*
  - *Interest difference is 0.9% (according to publicly available information); can be reduced by 0.4% to 0.5%;*
  - *1/5 of the portfolio changes each year;*
  - *Annual benefits: € 28 million (3,337,797 x 106,000 x 10% x 0.4% x 0.2). A simulation could consist in using 5% and 30% instead of 10%.*

- Use of a break-even approach (calculating the amount of benefit needed - for example a reduction in loss needed - to cover the costs incurred)

  Example: assume that a particular type of incident could generate costs of € 2 billion, and that, as a result of an accounting scandal, supervision of financial reporting and of auditors is introduced. Assume further that this regulation brings with it direct and indirect costs of € 50 million. In this case, the proposed rule will break even if the risk of an incident is reduced by 2.5%. The question then arises whether this reduction of risk is expected to be realistic or not[8].

[8] The analysis in this example looks at a rule in its totality and therefore gives an intuitive indication of the total ratio between costs and benefits. In order to arrive at efficient supervision, an analysis of the individual components must be carried out.

- Preparing a survey ('beneficiaries' of the regulation may be asked what they are prepared to pay for the supervision)

> *Example: Market research within the context of evaluating the Financial Information Leaflet shows that at present the consumer is prepared to spend € 3.10 for this document. With an annual issue of 12 million Information Leaflets, for example, the estimate of the value (and therefore the quantification of the benefits) is € 37 million.*


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APPENDIX 5 – SELECTED REFERENCES

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  http://www.fsa.gov.uk/pubs/other/Oxera_report_20060622.pdf

- UK Cabinet Office (2006): **Regulatory Impact Assessment Guidance**,
  This a revised version of UK Cabinet Office (2003): **Better Policy-Making: A Guide to Regulatory Impact Assessments.** It provides background information on the meaning and purpose of IAs and step by step guidance on the procedure for preparing and presenting them.
  http://www.cabinetoffice.gov.uk/regulation/ria/ria_guidance/index.asp

Ireland

- Irish Financial Services Regulatory Authority (2005): **Consumer Protection - Regulatory Impact Analysis**
  http://www.ifsra.ie/data/CP_Files/Consumer%20Protection%20Code%20Regulatory%20Impact%20

Analysis.pdf

- Department of the Taoiseach (2005): **RIA Guidelines**
  The obligations and guidelines contained in this document as well as in the following one apply only to Government Departments and offices and do not, in any formal way, apply to the IFSRA.
  http://www.betterregulation.ie/index.asp?docID=78

- Department of the Taoiseach (2005): **Report on the Introduction of Regulatory Impact Analysis across the Irish Civil Service**
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  http://www.betterregulation.ie/attached_files/Pdfs/RIA%20english.pdf

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- Bundesregierung (2000): **Moderner Staat – Moderne Verwaltung – Ein Leitfaden zur Gesetzesfolgenabschätzung**
  The RIA Guidelines of the German government (in German only).
  http://www.staat-modern.de/Anlage/original_549866/Moderner-Staat-Moderne-Verwaltung-Leitfaden-zur-Gesetzesfolgenabschaetzung.pdf

Netherlands

- Dutch National Bank (2002): "Regulatory Impact Analysis as new instrument for the Bank", *Quarterly Bulletin DNB*, June
  http://www.dnb.nl/dnb/bin/doc/qb2002q2_tcm47-146974.pdf

New Zealand

- Ministry of Economic Development (MED) of New Zealand (1999): **A Guide to Preparing Regulatory Impact Analysis**
  http://www.med.govt.nz/templates/MultipageDocumentTOC____607.aspx

United States of America

- Office of Management and Budget - OMB (1996): **Economic Analysis of Federal Regulations Under Executive Order 12866**
  http://www.whitehouse.gov/omb/inforeg/riaguide.html

- OMB (1992): **Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs**, Circular No. A-94 revised
  http://www.whitehouse.gov/omb/circulars/a094/a094.html

- OMB (1992): **Regulatory Analysis**
  http://www.whitehouse.gov/omb/circulars/a004/a-4.pdf

3. IA IN PRACTICE

FSA

- FSA (2006): **Better Regulation Action Plan**
  This document updates the FSA's own plans for reform of its rules and regulations, first set out in December 2005. It reports on the progress made since then, and relates that work to the two studies on costs of regulation also published simultaneously. In particular, it shows that rules which account for over three quarters of the administrative costs are already subject to review by the FSA as part of

its Better Regulation Action Plan. The FSA now intends the detailed rule by rule analysis of incremental costs set out in the Cost of Regulation Report by Deloitte to shape its future review of regulatory reform.
http://www.fsa.gov.uk/pubs/other/2660_Action_plan.pdf

- Shapiro A.A., Stenby E.H., Franks J.R., Schaefer S.M., and Staunton M.D. (1997): **"The direct and compliance costs of financial regulation"**, *Journal of Banking and Finance,* Vol.21 (11-12), 1547-1572
  The study, which was commissioned by an industry body, has been criticised for its opaque methodology.
- Dubow, B. and N. Monteiro (2006): **Measuring Market Cleanliness**, FSA Occasional Paper 23 http://www.fsa.gov.uk/pubs/occpapers/OP23.pdf
- Monteiro, N., Q. Zaman and Leittersdorf, S. (2007): **Updated Measurement of Market Cleanliness**, FSA Occasional Paper 25 http://www.fsa.gov.uk/pubs/occpapers/OP25.pdf
- Leittersdorf, S., Nicoletti, P. and Winkler, C. (2008), **The UK Listing Rules and Firm Valuation,** FSA Occasional Paper 28 http://www.fsa.gov.uk/pubs/occpapers/OP28.pdf

Netherlands Authority for the Financial Markets (AFM)

- Ruitenbeek, M. and J. Wielhouwer (2006): **Cost-Benefit Analysis in Financial Supervision**

Bundesanstalt für Finanzdienstleistungsaufsicht

- BaFin (2006): **Survey on Regulatory Impact Assessment Practices by Financial Regulators in Single Regulator Countries**

European Union

- Renda, A. (2006): **Impact assessment in the EU: the state-of-the-art and the art of the state,** Center of European Policy Research
  This study focuses on the latest developments in the United States, UK, and EU, and presents a scorecard analysis of the Commission's extended impact assessments. The author concludes with a road map for improving the transparency, efficiency, and effectiveness of the EU Integrated Impact Assessment model.

- Formez (2004): **A comparative analysis of Regulatory Impact Assessment in ten EU countries**
  A report prepared by the Italian consulting firm Formez for the Directors of Better Regulation DBR Group.
  http://www.betterregulation.ie/index.asp?docID=66
  http://www.betterregulation.ie/attached_files/Pdfs/Report%20on%20RIA%20in%20the%20EUa.pdf

Policy Research Initiative of Canada

- Jacobs, S., Jacobs and Associates (2006): **Current Trends in Regulatory Impact Analysis: The Challenges of Mainstreaming RIA into Policy-making**
  This is a short version of the full report for the Policy Research Initiative.
  http://www.regulatoryreform.com/pdfs/Current%20Trends%20and%20Processes%20in%20RIA%20-%20May%202006%20Jacobs%20and%20Associates.pdf

- Jacobs, S., Jacobs and Associates (2006): **Regulatory Impact Analysis in Regulatory Process, Method, and Co-operation: Lessons for Canada from International Trends,** Policy Research Initiative of Canada Working Papers 026
  This is the full version.
  http://policyresearch.gc.ca/page.asp?pagenm=pub_wp_abs#WP026

OECD

- OECD (1997): **Regulatory Impact Assessment – Best Practices in OECD Countries**, Paris
  http://www.oecd.org/dataoecd/21/59/35258828.pdf

- OECD: **Regulatory Management Reform – Reports by Country**, Paris
  http://www.oecd.org/countrylist/0,2578,en_2649_34141_1794487_1_1_1_1,00.html
- OECD (2002): **Government capacity to assure high quality regulation in Turkey**, Paris
  http://www.oecd.org/dataoecd/40/6/1840728.pdf
- OECD (2004): **Regulatory Impact Assessment Inventory**, Paris
  http://www.oecd.org/dataoecd/22/9/35258430.pdf

4. EXAMPLES OF CONSULTATIVE PAPERS IN FINANCIAL REGULATION

- FSA
  Consultation Papers generally contain a section on CBA and competition analysis.
  http://www.fsa.gov.uk/Pages/Library/Policy/CP/index.shtml

- BaFin
  (in German only)
  http://www.bafin.de/cln_011/nn_722594/DE/Unternehmen/Konsultationen/konsultationen node.html?nnn=true

- Irish Financial Services Regulatory Authority
  http://www.ifsra.ie/frame_main.asp?pg=%2Fconsultation%5Fpapers%2Fcp%5Frecs%2Easp&nv=%2Fconsultation%5Fpapers%2Fcp%5Fnav%2Easp

- New Zealand
  http://www.med.govt.nz/templates/Page____17889.aspx


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