ABN·AMRO

ABN AMRO Bank N.V.

# Impact Assessment 2022: Note on methodology

# Contents

# Introduction

## About this document

The ABN AMRO Impact Report 2022 includes an impact assessment, which provides an assessment of the impact of the majority of ABN AMRO's activities during 2022. This document provides an overview of the methodology, data and modelling used to make the Impact Report.

This document is structured as follows. It starts with the chapter 'Scope of the assessment' which describes the scope of the Impact Assessment for ABN AMRO. Then, the chapter 'Methodological Approach' provides the key methodological approach (generic to all capitals and impacts assessed). It is followed by the chapter 'Input Data' which discusses input data and its procedures. The chapter 'Modelling Approach' provides the modelling approach and the last chapter 'Key Assumptions' lists the main assumptions and limitations of the assessment.

Two appendices supplement this document. The first one gives a high-level overview of the methodological approach per capital. The second appendix provides a list of all impacts in scope, with a brief description and a note on the methodological approach.

The methodology described in this document is based on the Impact-Weighted Accounts Framework from the Impact Economy Foundation (IEF) and Integrated Profit and Loss (IP&L) Assessment Methodology (IAM) of Impact Institute.[1]

### Context of the Impact Assessment

Between 2014 and 2018, a number of pilot impact assessments were conducted. These assessments strengthened the understanding of the impact ABN AMRO has, as a bank, through both its operations and value chain. The pilot assessments include the diamonds industry, mortgage provision and a qualitative impact assessment for the bank as a whole. Based on these and other pilots, the concept of an Integrated Profit & Loss Assessment was developed. ABN AMRO has been working on this concept with Impact Institute and other partners. While this remains a work in progress, an extensive overview and understanding of ABN AMRO's impact has been constructed. The first bank-wide assessment was published in the 2018 Impact Report. In 2019 and 2020, an Impact Summary of the results was published in the Integrated Report. The Impact Report includes a comparison of 2022 and 2021 results.

Impact measurement and impact assessment is still a young science and our methodology continues to evolve. With this assessment, we already have an extensive overview and understanding of our impact. However, it remains a work in progress. Impact indicators and valuation factors may change in the future and new ones may be introduced.

### Goal of the Impact Assessment

The goal of the Impact Assessment 2022 is to better understand the impact we made as ABN AMRO during 2022 and to provide more transparency to our stakeholders about the impact we had on them.

[1] Impact Institute, (2020a); Impact Institute, (2020b).

# Scope of the Impact Assessment

This section will cover the various scoping aspects of the Impact Assessment. This includes time scope, activities scope, capital scope, stakeholder groups scope, value chain scope, and impact scope. Note that impact measurement and valuation is a developing field, and elements of the scope and approach might change over time.

## Time scope

The Impact Assessment is assessed for the calendar year 2022. The scope includes both realised well-being (and realised breaches of rights) as well as the increase or decrease in the value of assets to society during 2022[1].

## Activities scope

In this assessment, internal impacts (effects that are reflected in the prices of transactions ABN AMRO is involved in) are measured for 95% of the organisation's activities and external impacts (effects that are not reflected in the prices of the transactions ABN AMRO is involved in) are measured for 80%, where coverage is measured according to the contribution of the impacts in scope to the Consolidated Income Statement of ABN AMRO Bank N.V. These percentages are calculated by considering the proportion of each of the line items in the Consolidated Income Statement that reflect activities that are covered for internal and external impacts.

## Capital scope

The capitals in scope for the assessment are produced capital, human capital, social capital and natural capital. Produced capital is a direct combination of manufactured, financial and intellectual capitals. Figure 1 below provides a brief description for each of the capitals in the application of impact assessment.

**Figure 1: The six capitals for impact assessment**

### Produced capital

**Manufactured capital**
All tangible assets. This includes the assets used for production (property, plant, and equipment, sometimes collectively referred to as manufacturing capital). In the context of Impact Assessments, this also includes the tangible assets of intermediate and finished products.

**Financial capital**
All assets that are a form of money or other financial assets, including contracts. Financial capital is owned by a specific stakeholder in almost all instances. Almost all financial capital exchanges between stakeholders preserve the total amount of financial capital (positive impact for one, and negative for the other that is compensated in another capital).

**Intellectual capital**
Intangible assets either with or without legal rights. Intangible assets cover intellectual property and organisational capital. In the context of Impact Assessments, this also includes the value of services provided.

### Other capitals

**Human capital**
The productive capacity embedded in individual people. This includes their health, their competences and the time they put into producing goods and services. In addition, in the context of impact statements, elements of well-being are listed under human capital if they occur at the level of individual people.

**Social capital**
Value embedded in groups of people – from family to the global community – and includes social ties, norms, networks, and brands. Well-being effects are often listed under social capital if they only impact a group of people and could not be said to impact only one, singular individual.

**Natural capital**
All stocks of natural assets, accounting for their quality and overall scarcity. It contains living (biotic) and non-living (abiotic) natural resources including scarce resources, climate, and ecosystems that provide benefits to current and future generations ('ecosystem services').

[1] A reassessment on 2021 Impact results is included in the Impact Report 2022.

## Stakeholder group scope

The stakeholder groups in scope for the assessment are clients, employees, investors, and society. Table 1 on the right offers the properties of the stakeholder groups.

## Value chain scope

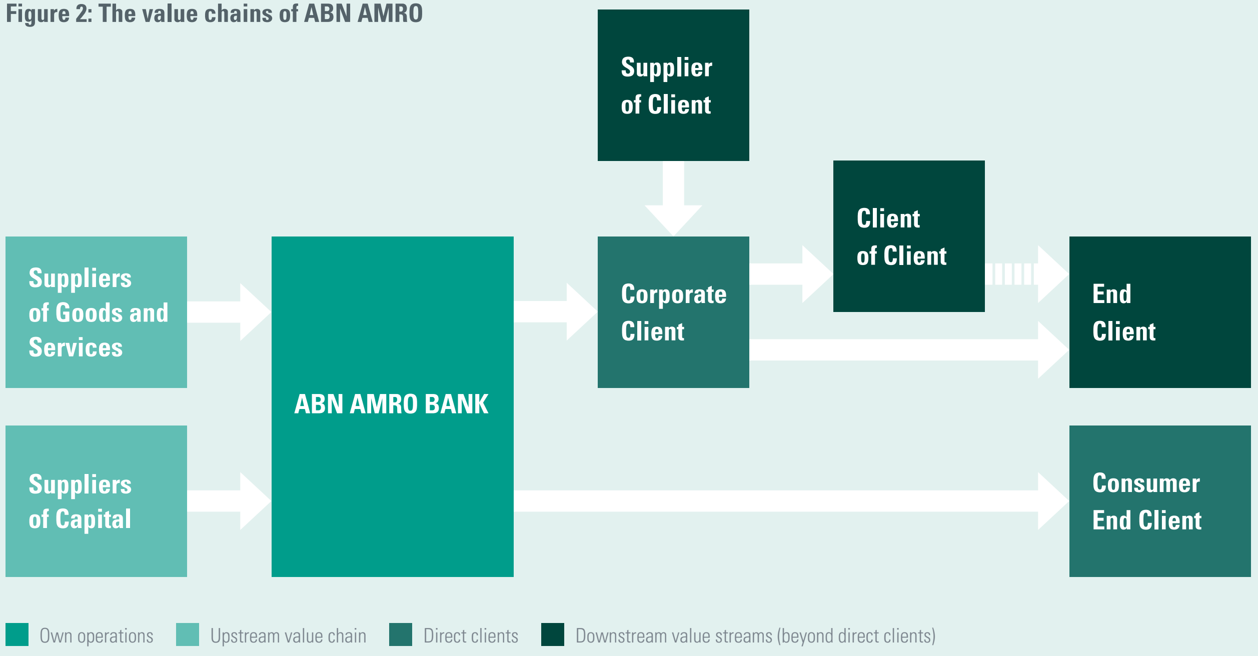
The value chain of ABN AMRO is the combined total of all value chains for all products and services ABN AMRO contributes to and has a shared responsibility for. A value chain consists of all businesses and actors that contribute to the production and delivery of a specific final good or service. In this assessment, there are four value chain scopes: own operations impacts, client impacts, upstream value chain impacts and downstream value chain impacts beyond direct clients.

Own operations impacts refer to (direct) impacts that have effects mainly due to the own operations of ABN AMRO. Client impacts refer to (indirect) internal impacts generated at clients of ABN AMRO, both corporate clients and retail clients. Upstream value chain impacts refer to (indirect) impacts at suppliers of goods, services, and capital. Lastly, downstream value chain impacts beyond direct clients refer to impacts that originate at direct and indirect suppliers and clients of ABN AMRO's clients. The structure of these scopes are shown in Figure 2 on page 4. The impacts of the latter three value chain scopes relating to the activities of these actors are an indirect effect of the activities of ABN AMRO. As a result, ABN AMRO bears some responsibility for its impact. This is discussed in detail in the section 'The approach to attribution over the value chain'.

**Table 1: Properties of stakeholder groups**

| Clients | Employees | Investors | Society |
|---|---|---|---|
| ▶ Retail and SME clients<br>▶ Commercial, Corporate and Institutional Banking clients<br>▶ Private banking clients<br>▶ Public sector clients<br>▶ Brokers, intermediaries and other distributors | ▶ Full-time and part-time employees<br>▶ Sub-contractors | ▶ Shareholders<br>▶ Bondholders | ▶ Suppliers and external consultants<br>▶ Other business partners<br>▶ Local communities<br>▶ Governments and regulators<br>▶ NGOs |
| Stakeholders who receive products or services from ABN AMRO. Note that deposit holders who have a function to provide capital to ABN AMRO, are also clients as their deposit account reflects a service provided by ABN AMRO. | Stakeholders who are full-time and part-time employees, as well as sub-contractors of ABN AMRO. They receive a salary or wage and other benefits from the company and constitute much of the human capital. | Shareholders and bondholders of ABN AMRO that provide financial capital to the organisation. They are most directly affected by the financial results of the organisation. | All other stakeholders. This includes direct and indirect suppliers of goods, services and capital, including external consultants; business partners; local communities; governments and regulators; other (non-governmental) organisations; the organisations upstream and downstream ABN AMRO's business clients; and all others who are affected by ABN AMRO or its value chain – including the entire global community in case of 'natural capital' impacts. Note that this stakeholder group also includes clients, employees and investors of organisations other than ABN AMRO. |

Figure 2: The value chains of ABN AMRO




A simplified overview of the value chains of ABN AMRO, and the business activities that different impacts can relate to. The value chain does not explicitly take into account (and does not attribute impact to) governments, regulators, NGOs, media or any other actors that impact the value chain but are not a direct or indirect supplier or client, though they can influence the value chain.

## Impact scope

The impact groups in scope for the Impact assessment are presented in Appendix II to this document.

The impacts to be included in the scope were assessed based on both internal input (from ABN AMRO) and external input. The internal input included materiality matrices of ABN AMRO, existing impact studies from ABN AMRO, and internal expert input. The external input included materiality matrices from other banks, direct existing impact studies from other organisations, and external expert input. A balanced selection of positive and negative impacts in scope was aimed for.

External costs in the Statement are not netted, unless they are shown unaggregated elsewhere.

The following potentially material impacts have not been assessed, mainly due to limited data availability: contribution to money creation, and contribution to financial system (in) stability. Similarly, the consumer and producer surplus of a number of activities have been placed out of scope and for some impacts the scope of sub-effects is limited to where robust data is available (e.g., the scope for air and water pollution only includes pollutants for which data is available on both emission levels and valuation.

# Methodological Approach

This section describes four key elements of methodology: the properties of reference scenarios, the approach to attribution over the value chain, the (high-level) approach to top-down and bottom-up analysis, and the approach to valuation. The methodology is based on the approach described in the Impact Assessment Methodology (IAM) of Impact Institute.[1]

## The properties of a reference scenario

Impact is defined as the difference between the outcome of a set of activities and a counterfactual outcome of a reference activity. The set of activities for this Impact Report are the activities that ABN AMRO performs, such as providing mortgages, employing people and paying suppliers.

Within the scope of this Impact Assessment, a reference is a no-alternative scenario and impact is referred to as absolute impact. In a no-alternative scenario ABN AMRO is not active, and no alternative activities (such as competing banks taking over any of ABN AMRO's activities) are modelled.[2, 3] As a result, this reference helps assess the impact of the activities itself rather than making a comparison with how others would perform those activities. For example, the greenhouse gas emissions of ABN AMRO's own operations are simply given by the volume of the emissions. That is, they are compared with a reference where they are not emitted, as opposed to a reference that would need to model how much other organisations would emit in a reference.

So-called marginal impact is not in scope in the Impact Assessment. Marginal impact is impact where the reference scenario includes a specific alternative. This can be increased activity of ABN AMRO's competition. In that case, marginal impact would show the difference between the outcomes of ABN AMRO's operations, and those of competing banks. As ABN AMRO operates in a competitive market, these differences are expected to be relatively small and focus is on absolute impact only.

## The approach to attribution over the value chain

As with all organisations, ABN AMRO creates value, together with other organisations, in its value chains. A simplified representation of these value chains is given in Figure 2. ABN AMRO understands that it has responsibilities concerning the activities of its suppliers, clients and investments, and the impact thereof. This follows, for instance, from closely monitoring human rights issues at its clients and their value chains.[4]

In an impact assessment, the idea of value chain responsibility is quantified. This naturally gives three options: full primary responsibility, full shared responsibility, and shared responsibility with a primary responsible. Firstly, full primary responsibility is when impacts that occur in the own operations of an organisation are fully attributed to that organisation, with no attribution to any of its value chain partners. Secondly, full shared responsibility is when impacts that occur in the value chain are first added together, and then distributed over the different value chain partners, with a distribution that is not sensitive



1 IAM is described in two documents. First, IAM Core (Impact Institute, 2020a) which provides basic definitions and requirements for IP&L Assessments, and which is based on the Framework for Impact Statements (Impact Institute, 2019). Second, the IAM Supplement 'Impact Contribution' (Impact Institute, 2020b) describes a way to practically apply the principles in IAM Core regarding reference scenarios and attribution of impacts over the value chain.
2 Without ABN AMRO being present, the activity of suppliers to ABN AMRO decreases as ABN AMRO is no longer active as a buyer. The reduction in their activity is assumed to be proportional to the share they supply to ABN AMRO. Similarly, the activity of business clients of ABN AMRO decreases. This is modelled by the share that ABN AMRO's input contributes to its sales.
3 The activity of providing mortgages and deposit services deserves special attention to prevent unrealistically large well-being effects being part of the Impact assessment. In line with the general properties of the no-alternative reference, mortgage holders are assumed not to have a mortgage in the alternative. This results in most of them not being able to buy a house. However, they are not assumed to be homeless, but rather have access to a rental home. Similarly, for deposit services, account holders do not have access to the accounts and as a result, cannot make digital transactions. However, instead of not being able to make any transactions, they are assumed to be able to make cash transactions.
4 ABN AMRO, (2020).

to the organisation at whose own operations the impacts originally occurred. Thirdly, shared responsibility with a primary responsible is a combination of the two options above. Part of the impact is re-attributed over the value chain, but not all of it. This recognizes that organisations in the value chain have a form of responsibility for each other's impact, but that they always have more responsibility for their own impact.[1]

Based on this, three categories of impact can be identified:

- **Mainly internalities.** In the Impact Assessment of ABN AMRO, full primary responsibility is used for internal impacts. These reflect effects that are reflected in the prices of transactions we are involved in, and that typically only affect directly involved stakeholders. There is no re-attribution over the value chain. Examples of this include the salaries paid to employees, opportunity cost of capital, and payments of clients for ABN AMRO's services.[2]

- **Externalities with a primary responsibility.** For (positive and negative) external impacts, shared responsibility is acknowledged, but the attribution also takes into account that there is a primary responsible. This is the third position above, and it is modelled by taking the direct average of full primary responsibility and full shared responsibility – that is, the organisation that creates the impact in the first place, is assigned 50% of the impact directly, and the other 50% is shared over the full value chain.

  In this way, ABN AMRO's Impact Assessment contain elements of impact from its value chain partners (and the Impact Assessment of ABN AMRO's value chain partners contain elements of ABN AMRO's impact), but it is also ensured that the largest share of impact is always attributed to the organisation that creates it in the first place. If ABN AMRO creates an impact, it is included in their own impact statement for more than 50% (and for a smaller share to the impact statements of their value chain partners) and if a value chain partner creates an impact, it is included mostly in their own impact statements, but a share less than 50% shows up in ABN AMRO's impact statement. See the end of this section for a simple example of how this is calculated.

  Examples of externalities modelled in this way are occupational health and safety incidents, financial distress due to difficulties to repay loans and contribution to climate change.[3]

- **Externalities without a primary responsibility.** For externalities for which it is not feasible to identify a primary responsible, full shared responsibility can be applied, and the impacts are re-attributed fully over the value chain. This type of impact has not been identified in ABN AMRO's Impact Assessment.

  For all externalities, it is possible to either identify ABN AMRO as primary responsible (and they are attributed a majority of the impact) or a value chain partner as primary responsibility (and ABN AMRO is attributed a minority of the impact).[4]

The share of impact that is attributed to ABN AMRO versus their value chain partners (for the part of impact that is attributed over the value chain at all) is modelled based on how much of ABN AMRO's revenue is part of its added value versus paid to its suppliers of goods, services and capital. This uses the Consolidated Income Statement for the year 2022.

For every unit of impact per Euro of revenue or expense, ABN AMRO is attributed 45% of the value chain impact. This follows from the table below, as the share of the (upstream) value chain payments that are associated with ABN AMRO's added value as opposed to suppliers (value chain partners).[5]

[1] Note that in all approaches 'impact is conserved', i.e., there are no instances where the same impact is attributed to two organisations simultaneously or where the totality of the impact is not accounted for. Alternative positions, such as where an organisation accounts both for all of its own impact as well as a share of the impact of its partners, may lead to double counting.
[2] In IAM (Impact Institute, 2020), this corresponds to impacts of category I.
[3] In IAM (Impact Institute, 2020), this corresponds to impacts of category II.
[4] In IAM (Impact Institute, 2020), this corresponds to impacts of category III.
[5] The method presented focusses on the attribution between ABN AMRO and its upstream value chain partners. This is complete for value chains where ABN AMRO delivers the final service to retail clients (B2C services). For business-to-business services, a complete model should also contain attribution to organisations downstream of ABN AMRO. In this Impact Report, this additional analysis has only been performed in one situation: the one where mortgage activities from ABN AMRO lead to indirect stimulation of the construction sector. In line with the general attribution principles, 50% of associated impact is attributed to the construction companies that create the impact in the first place. To attribute the second 50%, it is used that 17% of a homeowner's monthly living costs are interest payments for the mortgage (EUR 380 of an estimated EUR 2,300. As a result, the attribution to ABN AMRO is 50% × 17% × 45% = 4%.

## Table 2: Revenue

| (in EUR million) | Value | Note |
|---|---|---|
| Interest income | 7,934 | |
| Fee and commission income | 2,271 | |
| Net trading income | 282 | |
| Share of result in equity accounted investments | 107 | |
| Other income | 251 | |
| **Total** | **10,845** | |
| | 100% | |

## Table 3: Associated with payments to suppliers (value chain partners)

| (in EUR million) | Value | Note |
|---|---|---|
| **Suppliers of capital:** | | |
| Interest expense | 2,512 | |
| **Suppliers of goods and services** | | |
| Fee and commission expense | 493 | Assumed to mostly reflect supplier payments. |
| General and administrative expenses | 2,796 | Assumed to mostly reflect supplier payments. |
| Depreciation and amortisation of tangible and intangible assets | 172 | Used to reflect supplier payments for tangible and intangible assets, where depreciation and amortization reflect investment levels over the last years. |
| **Total** | **5,972** | |
| Share of revenue | 55% | |

## Table 4: Associated with ABN AMRO's added value

| (in EUR million) | Value | Note |
|---|---|---|
| Personnel expenses | 2,458 | Assumed to mostly reflect payments to employees and the government; supplier payments (e.g., for lease cars) are not explicitly subtracted. |
| Impairment charges on financial instruments | 39 | |
| Income tax expense | 509 | Although the government crucially supports the functioning of ABN AMRO, tax payments to the government are assumed not to be a supplier of ABN AMRO |
| Profit for the year | 1,867 | |
| **Total** | **4,873** | |
| Share of revenue | 45% | |

**Example application of the attribution formula.**
Consider an impact of the externality type, where ABN AMRO is considered primarily responsible and creates 100 units of impact, and all the other organisations in the value chain are assessed to have 150 units of impact. In this example, the total value chain has 250 units of impact. Half of this is directly attributed to the organisations that create the impact in the first place. ABN AMRO gets 50 of the 100 units its primarily responsible for directly, and the other organisations get 75 of the 150 units directly. Of the 125 remaining units, ABN AMRO gets 45%, that is 56 units, and the other organisations get the remaining 74 units. In total, ABN AMRO's impact statement now reports 106 units.[1]

[1] Alternatively, this can be calculated from ABN AMRO keeping 72% (=50% + half of the 45%) of its own 100 units, and getting 22% (half of the 45%) of the 150 units in the remainder of the value chain. In this way, ABN AMRO again gets 106 units (72 from own operations and 34 units from the value chain).

## Methodological approach bottom-up and top-down analysis

Bottom-up and top-down are methodological approaches to assessing impacts. Which approach is used is determined by the data available and the nature of the impacts.

**Bottom-up analysis** entails impact measurement using specific, company level data. Impacts that have been assessed through bottom-up analysis use the impact pathway logic.

The bottom-up model assesses impacts in natural units based on primary data of ABN AMRO, characterisation factors of Impact Institute and secondary data. In most instances, the primary data of ABN AMRO needs to be transformed using either characterisation factors of Impact Institute or secondary data, or a combination of both in order to get to a quantified impact in natural units.

Next, the impacts in natural units are valued using monetisation factors from Impact Institute for well-being impacts and monetisation factors for basic rights impacts from the Global Impact Database.[1]

It can also be the case that the primary data of ABN AMRO is already in the natural unit that the monetisation factor calls for. In that case, the primary data are directly monetised using monetisation factors from Impact Institute for well-being impacts and monetisation factors from GID for basic rights impacts.

**Top-down analysis** entails impact measurement that (also) uses more generic data points that are reflective of the generic properties of an economic sector. Given that ABN AMRO's business client portfolio and supplier portfolio are large and diverse, it was not feasible to build bottom-up models for all value chain impacts. Instead, they are analysed with a top-down analysis that uses representative averages for sectors and countries.

In the Impact Assessment, top-down analyses are based on data provided by the Impact Institute's Global impact Database (GID).[2] The GID has its basis in input-output analysis and combines several input-output databases and their environmental and social extensions, see also the section 'External data - Impact Institute'. The GID contains the average impact per euro economic activity of 65 sectors in 141 countries[3], and monetizes each of the impacts to make them directly comparable when expressed in euro (or euro-equivalent) per euro.[4]

Downstream value chain impacts are first calculated per one unit of added value in a country-sector combination. This is based on the organisation's direct impact and its upstream and downstream value chains. The GID provides multipliers for value chain impacts. For example, the interest income on a loan represents the added value of ABN AMRO in that value chain, together with its direct and indirect suppliers. This is a measure of its contribution to that value chain.

An assessment of the size of the impact to be attributed to ABN AMRO and its direct and indirect suppliers follows from multiplication of added value with the value chain impact multipliers. To isolate the share of ABN AMRO, the attribution factor is used.

A similar approach is followed for ABN AMRO's investments, and upstream value chains.

## Valuation approach

Valuation is defined as the process of using a welfare dimension to express the normative desirability of impacts in quantitative units. In the Impact Assessment of ABN AMRO, this unit is a monetary one. A euro value (or euro-equivalent value) expresses what an impact is worth to a stakeholder.

Consistent use of the same unit for all impacts has the benefit that all impacts become comparable: a euro value for the Contribution to climate change impact can be compared to the euro value of the Income tax payments impact. Furthermore, impacts can be added, at least in principle. A limitation of this valuation approach is that not all stakeholders will value one euro the same: to a relatively poor person, one euro may provide more welfare than to a richer person or organisation.

There are two types of welfare dimensions: well-being and the respect of basic rights. Both have their own valuation approach.

Impacts corresponding to the well-being dimension are valued using an assessment of the gains or losses in well-being for the stakeholders involved. Some impacts can be valued very simply (1-on-1 monetisation), others must be valued with the monetization techniques 'Revealed Preference', 'Stated Preference' and 'Subjective Well-being' (see Table 5).

1 GID version 3.4.
2 GID version 3.4.
3 The initial ABN AMRO data was mapped to the SBI classification. This was then mapped first to the ISIC and then to the GTAP sector classifications.
4 For a good general introduction to environmentally extended input-output analysis see Kitzes, (2013).

**Table 5: Valuation approaches for impacts of the well-being dimension**

| 1-on-1 monetisation | Monetisating using revealed preference | Monetisating using stated preference | Monetisating using subjective well-being |
|---|---|---|---|
| Impacts that are naturally expressed in monetary terms, need not be monetised.<br><br>A limitation is that this does not explicitly take into account that one Euro can represent more well-being for one stakeholder than for the other. | The preference of people is derived from their choices, using either empirical data to derive a proxy for the value of a particular product or choice. This can be done by inferring preferences from market choices, using hedonic pricing to infer preferences, analysing natural experiments or conducting field experiments or incentivised laboratory experiments. | In stated preference techniques, people are asked about their preferences and their willingness to pay or willingness to accept for non-market 'goods' or 'bads'. | In the subjective well-being approach, people are asked about their subjective well-being (such as their satisfaction with their health or life) and the reported measures are associated with variables that can explain this well-being using (large) population datasets and statistical techniques. |

Impacts corresponding to the basic rights occur when certain rights are breached. Examples are the right to a decent standard of living (the impact Underpayment) and several environmental rights (the natural capital impacts). These are monetized using a remediation approach to assess the costs to society of these impacts. Remediation costs are an umbrella term for the costs of actions that need to happen to mitigate the effects as much as possible. This restores damage where that is possible and aims to compensate affected people and communities for residual damage. Additionally, remediation includes measures to prevent re-occurrence of the breaches of rights, and punitive elements that reflect the element of injustice.

This is in line with the approach described in the Principles for True Pricing.[1]

[1] True Price, (2020a).

# Input Data

The Impact Assessment uses data from ABN AMRO (primary data), Impact Institute data and secondary data. These three types of data are defined in Table 6 below. The following sections give more insight in the process of data collection and the management of the three input data types.

## Primary data process

Primary data is requested from data suppliers at ABN AMRO. Once received, two checks were performed on the data. First, a check for relevancy is done to establish whether the received data matches the data request. Second, a 'sanity check' was performed on the content of the provided data points. This includes checking whether the order of magnitude of the data points makes sense in relation to other received values and those of secondary data. If either of these checks failed or if any data points are missing or clarification required, further communication is made with the data supplier.

Table 6: Three types of data used for the Impact Assessment

| Primary data | External data – Impact Institute | External data – other |
|---|---|---|
| **General primary data**<br>Primary data that does not belong to any of the other categories. | **Well-being factors**<br>Data from Impact Institute used to quantify and monetise well-being impact. | **Modelling parameters**<br>Secondary data used as input for calculating the footprints of impacts and attribution factors. |
| **Annual financial reporting data**<br>Data from ABN AMRO's Annual Financial Reporting. | **External cost monetisation database**<br>Data with monetisation factors for rights-breaches impacts. | **Conversion factors**<br>Exchange rates, inflation rates and conversion factors for units of measurement. |
| **Payroll data**<br>Data concerning the payroll of ABN AMRO's employees. | **GID**<br>Data providing valued impacts per EUR added value on a sector-country level. | |
| **Portfolio data**<br>Data concerning ABN AMRO's portfolios for lending (Commercial Banking and Corporate & Institutional Banking), financial investments and assets-under-management (equity and bonds), as well as concerning ABN AMRO's suppliers. | | |

Some of the received data sets require a standardisation step in which categories used by ABN AMRO are translated to be used further. For example, the commercial banking lending portfolio is mapped first from SBI (Standaard Bedrijfsindeling) sector classification to the ISIC sector classification and finally to the Eora sector classification. If such a mapping had to be made, the resulting mapping table is validated by ABN AMRO.

Where 2022 data was not available, data from the most recent available period was used instead.

## External Data – Impact Institute

### Well-being characterisation and monetisation factors.

Well-being characterisation and monetisation factors of Impact Institute are used to value non-financial well-being impacts. Hierarchy rules for data quality apply, see section 'External data – Other'. Regarding well-being characterisation factors, sources that provide revealed preference factors are preferred for impacts for which good empirical market data is available, whereas factors derived with the subjective well-being approach are preferred if this is not the case. Stated preference factors are usually recognised as being less reliable.

## External cost monetisation database

A database with monetisation factors for external costs is used. It provides monetisation factors for Social, Human and natural capital impacts belonging to the right breaches dimension (external costs). It is based on the True Price Principles[1]. A subset of this database (monetization factors for global averages for 2021) is published open source by True Price[2].

Table 7 provides a sample of underlying data sources that have been used to construct the monetization factors for well-being and external costs.

**Table 7**

| Selection of underlying data sources | Description |
|---|---|
| **Kuik et. al. (2009). Marginal abatement costs of greenhouse gas emissions: a meta-analysis** | A meta-analysis of recent studies into the costs of greenhouse gas mitigation policies that aim at the long-term stabilisation of these gases in the atmosphere. |
| **CE Delft Environmental Prices (2017)** | A handbook that shows environmental prices, or indices expressing the social cost of environmental emissions and other interventions in euros per kilo pollutant. Environmental prices indicate the willingness-to-pay for accept pollution and other unwanted impacts. |
| **Dolan & Fujiwara (2012). Valuing adult learning: comparing well-being valuation to contingent valuation** | A study on the well-being effects of adult learning. As an important side-result, the paper derives a valuation function for a well-being scale. In the Impact Assessment, this is used together with Fujiwara (2013) under the assumption that it can be used in other well-being contexts as well. |
| **OECD (2012). The value of a statistical life: a meta-analysis** | A meta-analysis of valuation studies concerning the value of statistical life, the estimation of willingness to pay and analysis in the variability in the value of statistical life. |
| **Fujiwara (2013). A general method for valuing non-market goods using well-being data: three-stage well-being valuation** | The paper presents an approach to valuation of subjective well-being and as a result derives an estimate of welfare change and value. As an example, the values associated with unemployment are derived using the approach. In the Impact Assessment, the results are used together with Dolan & Fujiwara (2012) and assumed to hold for other contexts of well-being. |

## Global Impact Database

The Global Impact Database (GID) by Impact Institute contains information regarding the economic impact and selected externalities for 65 sectors in 141 countries. The GID makes use of global input-output (IO) databases such as EORA and Exiobase, environmental and socio-economic extension of IO databases, and public sources such as Wageindicator, ILOStat, and OECD statistics. These data sources are considered reputable and are also used by other international organisations. Additionally, data has been validated, outliers have been corrected for and missing data have been estimated.

The GID produces quantitative estimates of the direct and value chain impact of creating added value in a specific sector and country on 20 indicators for 5 of the 6 capitals (intellectual capital is out of scope) following the IP&L methodology. These are provided in monetary and non-monetary units.

The GID calculates value chain impact considering the direct and indirect impact of primary economic activity in a given country and sector by including suppliers and customers to that sector. To do so, the GID considers trade flows between sectors. Tracing these trade flows can provide information on impacts at all 'orders'. Here, first order impacts reflect those in the sector under consideration, second order impacts are considered as the impacts of the direct suppliers and customers of these actors, third order impacts as suppliers and customers of the second order, etc. The GID uses an algorithm based on the work of i.a. W. Leontief to approximate the input on all orders[3].

[1] True Price, (2020a).
[2] True Price, (2021).
[3] See Leontief (1936) for the original source and Kitzes (2013) for a good introduction to (environmentally extended) input-output analysis.

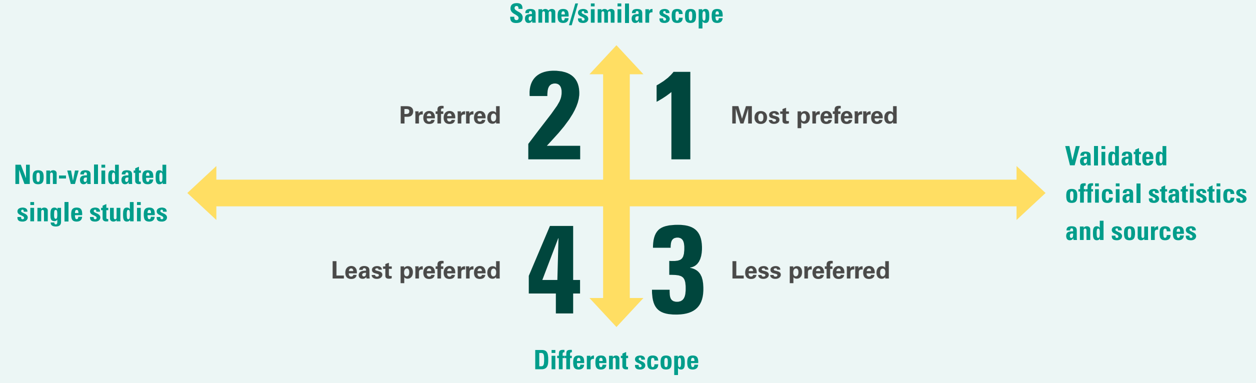
## External Data – Other

In the process of sourcing other external data, two data hierarchy rules are followed focusing on scope and validity:

- **Scope.** Sources of research most relevant and undertaken in the same geography, time period and under similar conditions to the situation under measurement are preferred over sources with a less directly applicable scope.
- **Validity.** Validated sources including official national or global statistics and peer-reviewed research are preferred over reports or single studies by research organisations.

The resulting data hierarchy is presented in Figure 3. Sources that have both the same or similar scope and are from validated official statistics and sources are most preferred. Only where the most preferred data is shown to not be available after significant searching, other sources are considered in the order indicated by the data hierarchy.

Figure 3: The data hierarchy



A selection of key data sources is provided in the table below.

**Table 8**

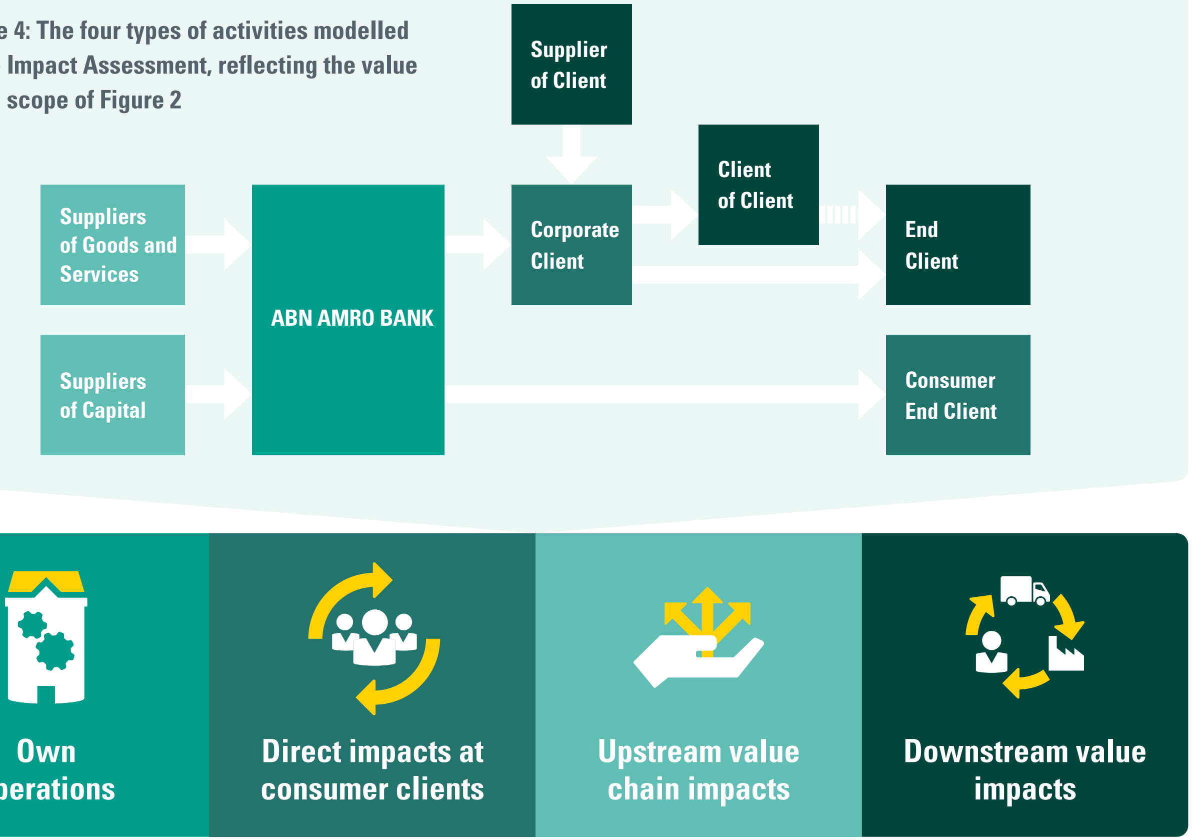
| Key data sources | Description |
|---|---|
| **European Social Survey 6 (2012), 'ESS6 ed.2.4'; Survey 9 (2018), 'ESS9 ed.2.0'.** | The European Social Survey is a bi-annual survey conducted across various European countries. It covers a variety of topics including subjective well-being. |
| **Verbooy et al. (2018), 'Time Is Money: Investigating the Value of Leisure Time and Unpaid Work'.** | A study investigating the willingness to pay for leisure time among employees in the Netherlands. |
| **Brandirectory (2022), 'Top 50 Dutch Brands Ranking'.** | An annually updated list and analysis of the top 50 brands in the Netherlands. It calculates the changes in brand value across the years. |
| **Zumbro (2014), 'The Relationship Between Homeownership and Life Satisfaction in Germany'.** | A regression analysis of the relationship between the combination of homeownership and various other social factors and well-being. The study using a sampling of people from across Germany. |
| **Centraal Bureau voor de Statistiek (CBS) (2022).** | National statistics office of The Netherlands. |
| **The World Bank (2022).** | A collection of conversion and inflation rates across the years. |
| **De Nederlandse Bank (DNB) (2021)** | A collection of reports related to money transactions in the Netherlands, e.g. 'Maatschappelijk Overleg Betalingsverkeer: Rapportage 2020' |

# Modelling Approach

The activities of the bank are mapped and categorised, according to the categorisation in section 'Value chain scope' (see Figure 4). Impacts are calculated as described below for the different types of business activities and aggregated to impact groups that contain one or more calculated impacts. Impact groups always belong to a single capital.

To arrive at the table that shows an overview of impact by stakeholder group and capital, a sum of impact groups is taken. These are presented in the following six ranges for both positive and negative sums: 0-50 million euro, 50-100 million euro, 100-500 million euro, 500-1,000 million euro, 1,000-5,000 million euro, and 5,000-10,000 million euro.

Figure 4: The four types of activities modelled in the Impact Assessment, reflecting the value chain scope of Figure 2



## Own operations

A large share of the impacts related to ABN AMRO's own operations are financial (e.g., Employee payments), or already expressed in financial terms (e.g., depreciation and investments in fixed assets). These are related to line items in the Consolidated Income Statement, Consolidated Statement of Comprehensive Income and the Cash Flow Statement. The modelling approach for these impacts is to assess all line items, link each of these line items to the relevant impacts and identify the corresponding affected stakeholder. The absolute size of these impacts is simply equal to their line-item amount, and the impact's valence is based on whether it is a positive or negative impact for the corresponding stakeholder.

Impacts related to own operations that are not already financial, or expressed in financial terms, include human capital creation, Well-being effects of employment and Contribution to climate change from emissions in own operations. These are modelled bottom-up, based on the impact pathway logic (see also section 'Methodological approach bottom-up and top-down analysis').

## Direct impacts for consumer clients

The consumers pay ABN AMRO for the services offered by the bank, such as taking out a mortgage or holding a deposit. The payment for these services alone is reflected as a negative financial capital impact for the clients. Conversely, the value of ABN AMRO's services for its consumer clients is split into two parts. First, the 'internal' part is equal in size to the client's payment (otherwise, the clients would simply opt out of the service). Second, the 'external' part reflects any surplus positive impact on top of this, modelled bottom-up (as discussed in section 'Methodological approach bottom-up and top-down analysis').

## Upstream value chain impacts

ABN AMRO upstream value chain impacts include those related to conventional suppliers and suppliers of capital. Using primary data from ABN AMRO and secondary data, the expenses to supplier (including interest expenses) and the sector and country of the supplier are determined. The impacts are modelled with a top-down model. To do this, the sector-classifications used by ABN AMRO are mapped to the sector-classification used by the GID.

Consequently, the supplier contribution per country and sector is multiplied with the GID monetised impact factors per euro of supply that are country and sector specific and summed. This yields the total monetised impact.

## Downstream value chain impacts

The downstream value chain impacts of ABN AMRO are assessed in much the same way as the upstream ones.

Note that the scope of the analysis includes the full value chain of ABN AMRO's Business-to-business (B2B) clients. Specifically for (other) suppliers of their B2B clients, banks can be seen as suppliers of a service supplementary to the client's own goods and services. When the banks provide more (and more valuable) services to their mutual clients, the other suppliers of that client, in turn, also have increased activity (as opposed to decreased activity for provision of complementary goods or services). As a result, banks are considered to have co-responsibility for (positive and negative) impacts in the full value chain of their B2B clients, including both upstream and downstream.

## Result refinement

Impact assessment is a young science and there are advances continually being made, in particular on data availability and impact valuation. In circumstances where ABN AMRO makes changes to the scope, data or modelling approaches used for the Impact Assessment, the results for the previous year may undergo the same refinement for comparability purposes. To the extent that these changes lead to material differences in reported figures, the specific changes will also be disclosed.

### Updating our 2021 results

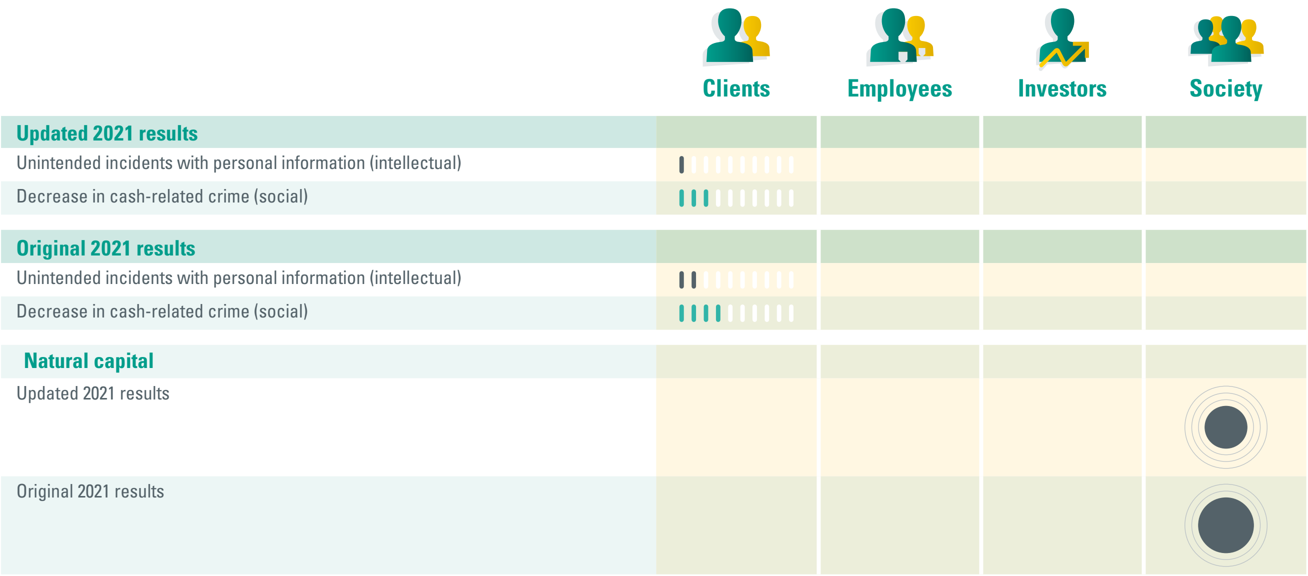
Since our last assessment, we have updated parts of our methodology and data sources. To allow comparison, we have also updated our 2021 results. All comparisons throughout this report are made against updated 2021 results.

Two methodology updates were made:

- The impact unintended incidents with personal information was updated to better assess potential damage done to customers. Valuation factors used to assess the impact were updated to be brought in alignment with those used throughout ABN AMRO bank.
- The impacts Contribution to Climate change and Use of scarce materials were refined to better include the impact of ABN AMROs mortgage portfolio. The attributed impact of the energy use of the mortgage properties are included.

A number of updates to secondary data were made:

- Impact Institute's Global Impact Database (GID) has been updated; the 2021 assessment was carried out using GID version 3.1. This has been updated to version 3.4.3. The update resulted in changes to most impacts but, in particular it led to a revisions in the impact range of air pollution, water pollution, use of scarce water. In addition it led to an update of the impact range for natural capital in the Impact Dashboard.
- A number of other data points were also updated, this was done in cases where 2021 data was not available at the time of the publication of the Impact Report 2021, but was now available.



# Key Assumptions

Impact measurement and valuation is still a young science and our methodology continues to evolve. In addition, some measurements are limited by data availability. Because of this, developing the methodology for these measurements requires making a number of assumptions regarding the operations of the organisation in scope and its value chain partners. This section aims to provide a comprehensive list of the assumptions that are deemed to have affected the outcomes of the Impact Assessment most critically.

**Table 9**

| Topic | Assumption | Limitation | Justification |
|---|---|---|---|
| **Scope and Methodology** | The organisational activities in scope provide a representative view of the impact of ABN AMRO | The organisational activities not in scope are not assessed explicitly | ABN AMRO is a bank that engages in a large variety of activities. An Impact Assessment need not be complete, as long as majority of the activities are assessed. The Impact Assessment assesses 95% of activities for internal impacts and 80% for external impacts, containing impacts among all stakeholders and all capitals, including both negative and positive impacts. |
| **Scope and Methodology** | In impact measurements, the no-alternative reference is used. All impacts are of the absolute impact type. | Marginal impact, that is impact with respect to the direct-alternative reference, is not assessed explicitly. | The no-alternative reference shows the actual contribution of ABN AMRO instead of a hypothetical comparison to a situation where other banks are more active. |
| **Scope and Methodology** | ABN AMRO is seen as co-responsible for the impact made by its direct and indirect suppliers and by its business clients (e.g., through lending), in the latter case including impacts in its full value chain (upstream and downstream of clients) | Without acknowledgement of co-responsibility for value chain activities, many impacts in the impact report would not be in scope. | Co-responsibility of businesses on the impacts of their value chains is acknowledged in the Guiding principles on Business and Human Rights[1] and the Guidelines for Multinational Enterprises.[2] Indeed, ABN AMRO makes conscious choices in deciding to which corporate actors the bank lends, based on not only financial, but also impact considerations.[3] |

[1] OHCHR, (2011).
[2] OECD, (2011).
[3] ABN AMRO, (2019a).

| Topic | Assumption | Limitation | Justification |
|---|---|---|---|
| **Scope and Methodology** | Mainly internal effects are attributed 100% to ABN AMRO; externalities are attributed 50% to the organisation where they take place at in the first place, and 50% re-attributed over the value chain. | With a different acknowledgement of co-responsibility for value chain activities, values in the Impact Assessment are different | For externalities, a form of value chain responsibility applies, but the organisation during whose own operations the impacts occur have a higher responsibility than other organisations in the value chain. |
| **Scope and Methodology** | For re-attribution of impact over the value chain, added value is used to assess the relative responsibility of ABN AMRO in its value chains | In value chains where ABN AMRO has low (high) added value, but a strong (weak) co-responsibility for the impacts of its value chain partners, the impact attributed to ABN AMRO is underestimated (overestimated) | Organisations that have a large share of added value typically have more influence in the value chains they participate in |
| **Scope and Methodology** | Re-attribution over the value chain is conducted over businesses with their share of added value in the value chain, not including governments and other indirect stakeholders.[1] | The degree to which governments and other organisations contribute to value chains, is not explicitly taken into account | Businesses create most value in value chains, while other parties are indirectly involved. |
| **Scope and Methodology** | A limited number of different attribution factors are used, even though ABN AMRO is active in many different value chains and in principle in each value chain, the attribution to ABN AMRO might be different | In value chains where the actual share of added value of ABN AMRO is higher (lower) than reflected by the simplified attribution factor, the impact to ABN AMRO is underestimated (overestimated) | The current approach intends to find a balance between technical correctness of a more complex model with multiple attribution factors, and a simpler and more transparent model with only a single attribution factor |
| **Scope and Methodology** | On average, the value of goods and services to the receiver is at least equal to the corresponding payments, and at most equal to the corresponding payments for a supplier. | If clients are not rational and/or enter a transaction not sufficiently free, the value of the transaction to them might be lower than what they pay for. Similarly, if a supplier is forced, the value of the goods or services they deliver might be higher than what they are paid for. These effects are not accounted for. | People and businesses that make rational choices do not choose to buy or supply products and services if they do not believe they benefit from the transactions in free markets. ABN AMRO functions under Dutch law, that protects clients and suppliers against participating in non-free or non-informed transactions |
| **Scope and Methodology** | Where top-down models are used, ABN AMRO's (direct and indirect) value chain partners are represented by the average value for their country and economic sector. | If partners perform differently than the average value for their country and sector, that effect is not taken into account. | ABN AMRO has a large supplier base and provides services to many clients. While each of them is likely to differ from the average of their country and sector, the collective deviation is likely to be much smaller. |

[1] One exception to this assumption is the recently added impact added value of prevented bankruptcies due to Covid-19 financial support measures. Financial support measures were in large part provided by the government or the government in collaboration with banks. For this reason, in the underlying calculations for this impact, a large part of the impact is associated with government.

| Topic | Assumption | Limitation | Justification |
|---|---|---|---|
| **Scope and Methodology** | To assess impact, we use a best-estimate valuation. Where there is uncertainty over models, our general approach is to select the more conservative option. This means that choices are made such that positive impacts are at their minimum and negative impacts at their maximum | Modelling errors are most likely to reduce positive impacts and increase negative impacts; accidental cancellation of uncorrelated errors is more unlikely | Impact measurement and valuation is still a developing field. Better assessments will be possible over time. A conservative approach prevents current reports from providing an overly positive view of the Impact Assessment of ABN AMRO |
| **Data** | When possible, primary data specific to ABN AMRO is used in the Impact Assessment. In the absence of primary data, data based on average values in the Netherlands was used, thereby assuming that ABN AMRO performs similarly to other banks or parties in the financial services industry. This choice was made on a case-by-case basis and depends on the specific use of the data points involved | Where direct data from ABN AMRO was not available, the replacement data could be a source of error | The selected approach uses primary data where possible, but takes a pragmatic approach where this is not the case, rather than placing large parts of the analysis out of scope |
| **Data** | In top-down models, the mapping to countries and economic sectors as in GID is based on available data. For assets-under-management, this is data on exposures at the end of the year | Where sector mappings are incomplete, this is a source of uncertainty | On portfolio level there is less uncertainty than for a single asset, given that uncorrelated errors are unlikely to add. Year end data is expected to represent holding during the year with acceptable uncertainty. |
| **Data** | To assess impact, we use a best-estimate valuation. Where there is uncertainty over data, our general approach is to select the more conservative option. This means that choices are made such that positive impacts are at their minimum and negative impacts at their maximum | Errors related to data selection are most likely to reduce positive impacts and increase negative impacts; accidental cancellation of uncorrelated errors is more unlikely | Impact measurement and valuation is still a developing field. Better assessments, including more complete and tailored data collection, will be possible over time. A conservative approach prevents that current reports provide an overly positive view of the Impact Assessment of ABN AMRO |
| **Valuation** | Monetization factors are assumed to be sufficiently complete and robust to provide a representative picture | Where monetization factors are not complete and/or robust (e.g., when damage cost is underestimated), this is not included in the analysis. | Impact measurement and valuation is still a developing field. Monetization factors are taken from reviewed sources, but are still expected to increase in completeness and robustness. |
| **Valuation** | Well-being can be valued in monetary terms. | Various philosophical arguments exist why one cannot or should not express well-being in monetary terms. | Expressing well-being in monetary terms enables impact measurement and valuation. Well-being is not equated to money, but monetary terms are used as a numeraire. |

| Topic | Assumption | Limitation | Justification |
|---|---|---|---|
| **Valuation** | In the valuation step, monetised values were assumed to represent constant well-being. That is, the effect that one euro may represent more well-being to one stakeholder than to another was not explicitly assessed | Well-being effects related to the issue that one euro may represent more well-being to one stakeholder than to another, are not in scope | Exact levels of well-being are difficult to quantify. Monetization expresses all impacts in an identical and objective unit, such that for the average stakeholder, their monetary gains or losses properly reflect their change in well-being. |
| **Valuation** | The well-being effect of a financial euro is exactly one euro-equivalent. | Well-being effects above or below one euro-equivalent are not explicitly included. | By the definition of euro-equivalency, one euro-equivalent of general well-being is on average equal to the euro-equivalent well-being generated by one financial euro. |
| **Valuation** | To assess impact, we use a best-estimate valuation. Where there is uncertainty over valuation elements, our general approach is to select the more conservative option. This means that choices are made such that positive impacts are at their minimum and negative impacts at their maximum | Errors related to valuation choices are most likely to reduce positive impacts and increase negative impacts; accidental cancellation of uncorrelated errors is more unlikely | Impact measurement and valuation is still a developing field. Better assessments, including new approaches to monetization, are possible over time. A conservative approach prevents that current reports provide an overly positive view of the Impact Assessment of ABN AMRO |

# Appendix I: High-level approach per capital

As discussed in the 'Methodological Approach' section, the Impact Statements of ABN AMRO are determined from either a top-down or a bottom-up analysis per impact. This appendix describes per capital which techniques were used. The next appendix provides a brief overview of how each impact was modelled.

## Commercial Capital

Commercial capital is the combination of three capitals: Manufactured, financial and intellectual capital. The impact types within each are described in the paragraphs below.

## Manufactured capital

The impacts within manufactured capital are of the following three types

- Changes in tangible assets of ABN AMRO, e.g., through depreciation and investments. These are modelled by directly summing elements from ABN AMRO's income statement and cash flow statement, that represent the financial effects of the change in manufactured capital.
- Client value of products. When clients pay for an activity of ABN AMRO that eventually increases their manufactured capital (tangible goods, e.g., when they are able to live in a house through an ABN AMRO mortgage), the value of what they get is always at least as large as what they paid for (otherwise, they would not participate in the transaction). The exact value of the manufactured capital is assessed through bottom-up models (for consumer clients) or top- down models (for corporate value chains). Client value is split in an internal effect and an external effect. The internal effect is by definition equal in size to the payments made. The external effect represents all value on top of the internal effect.[1]
- Value of goods delivered by supplier. When suppliers supply goods to ABN AMRO, this reduces their manufactured capital. The value of these goods to the suppliers is at most equal to what they receive in payment (if not, they would not participate in the transaction). In the Impact Assessment, the reduction in manufactured capital is assessed in a 'conservative' way and set equal to the payments to suppliers

## Financial capital

The impacts within financial capital are mainly of the following three types

- Impacts that reflect payments from the bank to a stakeholder or from a stakeholder to the bank. In the first case, these are listed as positive impacts for those that receive the payments (their financial capital increases); in the second case as negative impacts for those that make the payments (their financial capital decreases). These are modelled by directly summing elements from ABN AMRO's income statement.[2]
- Financial benefits or costs to stakeholders with respect to the situation where they would not be clients of ABN AMRO (technically, in a reference scenario – e.g., when a mortgage from the bank helps them make savings on their housing situation in a way that would not be possible without the mortgage). These are modelled with bottom-up models.
- Cost of capital. This represents the minimum return that investors in ABN AMRO require for their invested capital.[3]

## Human capital

The impacts within human capital are of the following two types

- Value of services delivered by suppliers, when the suppliers mainly make the time and expertise of their employees available. They are assessed in the same way as for goods as described under manufactured capital.

[1] An example to illustrate this effect: assume a client pays €453 in interest for a mortgage, but the value of that mortgage to him or her is €652. In that case, the internal effects are €453 and the external ones are €199.
[2] Note that some results might be counter intuitive. For instance, payments to employees (salaries and other employee benefits) are here listed as a positive effect, while they are a cost on the income statement (if payments to employees can be reduced, this increases profit).
[3] See e.g., Berk and DeMarzo, (2013) for a more complete discussion.

- Employee-related impacts, such as Well-being effect of employment, Occupational health and safety incidents and human capital creation. These are assessed bottom-up for ABN AMRO employees and top-down for employees of organisations in the value chain. Well-being effect of employment for society also includes a negative effect which accounts for decreases in well-being due to job loss as a result of bankruptcy at lending clients of ABN AMRO.
- Effect on health and safety due to Covid-19 is calculated both for employees and for members of society who may contract Covid-19 though contact with an infected employee. These are assessed bottom-up.

Note that while ABN AMRO employees form a stakeholder group on their own, employees at other organisations are included in the stakeholder group society.

## Intellectual capital

Most impacts within intellectual capital are assessed in a similar way as those in manufactured capital, but instead of tangible client value, it is intangible. An example of this is the value of ABN AMRO's financial advice to clients.

Additionally, intellectual capital includes two negative externalities: Occurrence of cybercrime and Unintended incidents with personal information. These are modelled with simple bottom-up models to describe the damage to clients.

## Social capital

The impacts within social capital are of the following three types

- Externalities that reflect that human rights and labour rights are not always respected, for instance child labour, underpayment and discrimination. ABN AMRO's Human Rights policy aims to prevent this from occurring. According to available data, these impacts either typically are assumed to be zero for ABN AMRO's own operations or were left out of scope. They are assessed through a top-down model.
- Impacts that reflect change in well-being for ABN AMRO's clients. These are modelled bottom-up.
- The change in brand value and customer loyalty show how much social capital ABN AMRO itself represents (or, more precisely, how this has changed over the last year). This is also modelled bottom-up.

## Natural capital

All but one of the impacts in natural capital are external costs. The externalities in the value chain are modelled similarly to those in social capital. The natural capital effects of ABN AMRO's own operations is typically much smaller. It is assessed with bottom-up models.

The single positive impact analysed is limitation of climate change through certificates. This is directly assessed with a small bottom-up model. The positive and negative impacts are reported separately and not in a single aggregated number.

# Appendix II: Impact Group List

Table 10 summarises relevant impact groups. The table also includes the approach and most important limitations in modelling these impacts. For all impacts that use data provided and reported by ABN AMRO's, the limitation holds that they are as complete as this data. See the section 'impact scope' on page 4 for a note on impact selection.

**Table 10: Impact groups and associated impacts**

| Nr | Impact group | Description | Approach |
|---|---|---|---|
| | **Commercial** (Manufactured + Financial + Intellectual) | | |
| | **Manufactured capital impacts** | | |
| 1 | **Contribution to final goods and services in value chain** | When the organisation engages in lending and investment activities, this contributes to the creation of goods and services that have value for the final users (positive impacts). | This is calculated by first mapping downstream activity to sectors and countries invested in. Downstream activity includes commercial and corporate lending, assets under management and the financial investments of ABN AMRO. The mapping is then multiplied by the GID country-specific (monetized) data for contribution to final goods and services per euro investment and summed over sectors and countries. |
| 2 | **Client value through increase in house value** | When home owners see the value of their houses increase (decrease) during the reporting period, this reflects an increase (decrease) in manufactured capital. | This impact measures the average change in house value in the Netherlands over 2021[1], with a correction for the share of mortgage that has already been paid off. This impact is modelled on the assumption that a change in house value represents an immediate increase in assets proportional to this change. |
| 3 | **Client value of money transfers** | Client value of money transfers created by the bank through the provision of financial infrastructure in that year (positive impacts). | This impact group consists of the sum of the external and internal value for money transfers. The internal effect is identical to the gross fee and income ABN AMRO receives from money transfers. The external effect measures the additional value to consumers through well-being changes related to these services. This impact is modelled on the assumption that the increase in non-cash payments reduces the direct and indirect costs of purchases with cash. |
| 4 | **Client value of money storage and management** | Client value of money storage and management created by the bank through the provision of financial infrastructure in that year (positive impacts). | This impact group calculates the impact made from the convenience and value of mobile banking through its increase in consumer well-being, reduction of cash use, and value through fees paid (a large portion of the internal part of the impact group is already accounted for in client value of money transfers). |
| 5 | **Client value of other infrastructure services** | Client value of other infrastructure services (such as securities and custodian services) provided by the bank (positive impacts) | The client value of services is in general equal to or larger than the corresponding payments. Impacts in this group are modelled assuming equality as the sum of income for securities and custodian services, as reported in the Income Statement. |
| 6 | **Value of infrastructure services provided by suppliers** | Value of infrastructure services provided by suppliers of the bank, such as payments, securities and custodian services (negative impacts). | The value to the suppliers of the services they deliver to ABN AMRO, is equal to or smaller than the corresponding payments. Impacts in this group are modelled assuming equality. This impact group consists of the sum of the payments for payment, securities and custodian services, as represented in ABN AMRO's Income Statement. |

[1] CBS (2021).

| Nr | Impact group | Description | Approach |
|---|---|---|---|
| 7 | **Balance of value of goods received from suppliers and provided to buyers of divested assets** | The balance of goods received from suppliers (which represents a negative change in manufactured capital for suppliers) and the divested assets of ABN AMRO to buyers of the assets (which represents a positive change in manufactured capital for buyers in society). A positive value indicates that the value of divested assets is larger than the value of goods purchased from suppliers, resulting in a net positive change in manufactured capital for society. A negative value indicates the value of goods purchased from suppliers is larger than the value of goods divested, resulting in a net negative change in manufactured capital for society. | The value to the suppliers of the goods they deliver to ABN AMRO, is equal to or smaller than the corresponding payments. Impacts in this group are modelled assuming equality. Additionally, the value of assets sold to buyers is equal or larger than the corresponding payments. Impacts in this group are modelled assuming equality. This impact group consists of the value of purchased expensed goods and purchased goods for investments and divested goods, as represented in ABN AMRO's Income and Cash Flow statements. |
| 8 | **Client value of housing** | Client value of living in a house as (co-)facilitated by the bank through mortgage provision (positive impacts). | This impact group measures the internal effect of housing value only (the external effect is taken into account in consumer client value through home ownership). It is identical in size to the total gross interest payments related to residential mortgages as reported in the ABN AMRO Income Statement. |
| 9 | **Gross increase in tangible assets** | Gross increase in value during the reporting period of tangible assets such as property, plant and equipment (positive impacts). | This impact group measures gross increase in the value of owned property and equipment by subtracting property and equipment sold from newly acquired property as inferred from the Income Statement and Cash Flow Statement.[1] |
| 10 | **Depreciation of tangible assets** | Decrease in value through depreciation during the reporting period of tangible assets such as property, plant and equipment (negative impacts). | This impact group consists of depreciation and impairment on all ABN AMRO tangible assets, as it is represented in the Income Statement. |
| | **Financial capital impacts** | | |
| 11 | **Payments by clients** | Payments from clients to the organisation. From the perspective of the client, these are negative changes of financial capital for them. | This impact group consists of the interest paid by businesses and consumers, fee & commission payments from businesses and consumers, and other payments from clients, as reported in ABN AMRO's Income Statement. In a few cases an assumption had to be made on whether an income line item reflects payments by clients or others. |
| 12 | **Payments made by other stakeholders** | Payments from stakeholders other than clients to the organisation. From the perspective of the stakeholders, these are a negative change of financial capital to them. | This impact group consists of the payments to ABN AMRO within the Income Statement from organisations that are not considered clients, such as trading partners. In a few cases an assumption had to be made on whether an income line item reflects payments by clients or others. |
| 13 | **Payments to suppliers for expensed goods and services** | Payments from the organisation to suppliers (for payments included as expenses in the income statement). From the suppliers' perspective, these are positive changes of financial capital. | This impact group consists of the payments to suppliers, as included in the ABN AMRO financial statements. In a few cases an assumption had to be made whether a certain financial statement element reflects payments to suppliers or to others. |
| 14 | **Employee payments** | Payments from the organisation related to employee expenses, including gross salary and a number of social security and pension contributions. These are positive changes of financial capital for employees (e.g., salaries) and the government (e.g., taxes). | This impact group consists of all employee-related elements in ABN AMRO's Income Statement. The share of the impact that reflects the stakeholder group government is estimated through the average salary tax rate in the Netherlands multiplied by the gross salaries, plus a contribution from social security payments. The remainder is to the stakeholder group employees. |

[1] Note that the name of the impact group 'Gross increase in tangible assets' assumes that the value of newly acquired property and equipment is larger than that of property and equipment sold. In the situation where this is the other way around, there is a decrease of tangible assets. Note that the net change in tangible assets follows from subtracting depreciation of tangible assets (that is always negative) from this value.

| Nr | Impact group | Description | Approach |
|---|---|---|---|
| 15 | **Income tax payments** | Payments from the organisation to the government related to income tax obligations. These are positive changes of financial capital for the government. | This impact group consists of payments of taxes from ABN AMRO to the government, which are taken directly from the ABN AMRO Income Statement. |
| 16 | **Interest payments** | Interest payments from the organisation to its clients, bondholders and others. These are positive changes of financial capital to them. | This impact group consists of the sum of interest payments to clients, investors, and capital suppliers, as reported in ABN AMRO's Income Statement. |
| 17 | **Net profit/loss** | If an organisation makes a net profit over a reporting year, this increases the company's stock of financial capital and there is a positive change of the capital. Part of this might in turn be used to pay dividends to shareholders. If the organisation makes a net loss, this reduces its stock of financial capital and there is a negative change of the capital. | Net profit is a reflection of ABN AMRO's profits over 2021 as represented in its Income Statement. |
| 18 | **Corrections for non-financial profit items** | Various non-financial capital changes (e.g., depreciation) are recognised as income and expenses in the income statement. In the Impact Assessment these changes are recognised under their respective capital. This group consists of changes to balance financial capital. | This impact group consists of the sum of correction for depreciation and amortisation, amount invested in assets, impairments on client debt, costs of impairment for client debt, and other non-financial expenses, as reported in ABN AMRO's Income Statement. |
| 19 | **Balance of payments to suppliers for investments and from buyers for divested assets** | The balance of payments from the organisation to suppliers for investments (for investments that are not included as expenses in the income statement) and payments from buyers of divested capitalised assets. A positive value indicates that payment to suppliers for investments is larger than payments received from buyers, which is a net positive change in financial capital for society. A negative value indicates that payments received from buyers is larger than payment to suppliers for investments, which is a net negative change in financial capital for society. | This impact group consists of the sum of the net payments to suppliers for investments in equipment, property, and intangible assets as reported in ABN AMRO's Cash Flow Statement. |
| 20 | **Cost of capital** | The Cost of the capital that is provided to the organisation by clients, equity holders, bond holders and others. This represents a negative impact to the suppliers of capital. | The opportunity cost of provided capital for the suppliers of capital is typically equal to or lower than the returns reflecting this provision of capital. Impacts in this group are modelled using equality based on interest payments and profit (i.e., the opportunity costs are set to be equal to the returns). |
| 21 | **Value of capital** | The Value of the capital that is provided to the organisation and to the organisation's stakeholders. This represents a positive impact. | The value of the capital that an organisation attracts, is typically equal to or higher than the interest rates for loans. For equity, this holds in the long term for profits levels. Impacts in this group are modelled using equality based on interest payments and profits. |
| 22 | **Value of services (financial) provided by suppliers** | When the organisation receives goods in some form from its suppliers, these represents negative changes of financial capital for the suppliers. | The value of the financial services to the suppliers that deliver them to ABN AMRO, is equal to or smaller than the corresponding payments. Impacts in this group are modelled assuming equality. This is the sum of fees for commitment, insurance, and investments, as reported in the ABN AMRO Income Statement. |

| Nr | Impact group | Description | Approach |
|---|---|---|---|
| 23 | **Consumer client value of lending services (non-mortgage)** | Value of lending services (non-mortgage) delivered by the organisation, which are positive changes of financial capital for consumer clients. | The client value of services is in general equal to or larger than the corresponding payments. Impacts in this are modelled assuming equality. This is the sum of ABN AMRO's income from lending services to consumers, as reported in the Income Statement. |
| 24 | **Business client value of lending services** | Value of lending services delivered by the organisation, which are positive changes of financial capital for business clients. | The client value of services is in general equal to or larger than the corresponding payments. Impacts in this group are modelled assuming equality. This is calculated as the sum of ABN AMRO's income from lending services to businesses, as reported in the Income Statement. |
| 25 | **Consumer client value through home ownership** | Clients of the bank experience savings and other financial capital benefits from home ownership, which are positive changes of financial capital for them. | This impact group reflects the degree that home owners have lower costs of housing then renters if repayments of the mortgage are seen as a form of capital formation, rather than a cost of housing. The impact is measured by calculating the differences between mortgage interest payments per household and an estimated rental expense in the reference. This is multiplied by the total number of ABN AMRO outstanding mortgages, with a correction for the share of mortgage that has already been paid off. |
| 26 | **Change in share price not captured in comprehensive income** | A positive (negative) share price change – respective to what can be associated with the comprehensive income – represents a positive (negative) change in financial capital for shareholders. | This consists of one impact that is assessed through the difference between the total stock value at year end and year start to the degree that this is not reflected by the change in book value. Data points uses are from the Financial Statements. Effects on bondholders are not assessed. |
| 27 | **Added value of prevented bankruptcies due to Covid-19 financial support measures** | The added value loss avoided from bankruptcies prevented due to Covid-19 related financial support provided to companies by ABN AMRO. This constitutes a positive financial capital impact for society and clients. | This is calculated by estimating the number of companies that avoided bankruptcy in 2021 and multiplying it by the average lifetime added value of a company in the Netherlands. The impact for clients and for society is calculated using the same method, but the value for clients is estimated using the portion of a company's added value that is from profits and the value for society measures taxes and salaries paid. Avoided bankruptcies is the difference between expected and actual bankruptcies in 2021. Expected bankruptcies was estimated using change in GDP as a predictor based on a linear regression between historical GDP change and bankruptcies. The lifetime value is estimated through the net present value of its added value using a discount rate that is based on the average cost of capital for Dutch SME's. An important assumption is that bankruptcies are really prevented, rather than delayed to future years. A portion of the total added value loss avoided is then assigned to ABN AMRO based on the proportion of Covid-19 financial support measures that Dutch banks are responsible for and market share of ABN AMRO in the Dutch SME lending market.[2] |
| 28 | **Contribution to tax collection through payment system** | Additional tax revenue that is collected from governments as a result of digital payment systems provided by the bank (positive impact for society). | This impact estimates the additional VAT that the government collects due to electronic payment systems, as compared with cash payments. This is calculated based on research which estimates the vat gap reduction from electronic payments. |
| 29 | **Other financial impacts** | Other changes in financial capital to the organisation and its stakeholders related to the operations of the organisation. | This impact group includes amongst others other comprehensive income, the value of insurance and investment services for business and consumers, the value of trading transactions and regulatory charges. |
| | **Intellectual capital impacts** | | |
| 30 | **Consumer client value of asset management** | Value of asset management services for consumer clients delivered by the organisation. Represents positive changes of intellectual capital to clients. | This impact group measures both the external and internal effect on clients of asset management. The internal effect is identical in size to ABN AMRO's income from asset management. The external effect is assessed in a bottom-up model using the willingness to pay of consumers for asset management. It is based on an external data point reflecting the price elasticity of demand. The accuracy is limited by the validity and applicability of the data source. |
| 31 | **Consumer client value of other fee-based services** | Value of other fee-based services for consumer clients delivered by the organisation. Represents positive changes of intellectual capital to clients. | The client value of services is in general equal to or larger than the corresponding payments. Impacts in this group are modelled assuming equality by summing the gross fee and commission income from services to clients other than the above. This is done using data reported in the ABN AMRO Income Statement. |

| Nr | Impact group | Description | Approach |
|---|---|---|---|
| 32 | **Business client value of other fee-based services** | Value of other fee-based services for business clients delivered by the organisation. Represents positive changes of intellectual capital to clients. | The client value of services is in general equal to or larger than the corresponding payments. Impacts in this group are modelled assuming equality by summing the gross fee and income from all services to other business, including leasing services. This is done using data reported in the ABN AMRO Income Statement. |
| 33 | **Change in intellectual assets** | Positive or negative changes in intellectual assets (e.g., intellectual property rights owned) of the organisation or its stakeholders. | This impact group measures the change in value of intellectual assets by taking the investment in intellectual assets and subtracting amortisation. This is based on data reported in the ABN AMRO Income Statement and Cash Flow Statement. |
| 34 | **Occurrence of cybercrime** | Occurrence of cybercrime are negative impacts and external costs both if they occur at the company (direct impact) or in the value chain as an indirect impact. | This impact group is calculated based on a source that estimates the total costs of cybercrime in the deposits and saving market in the Netherlands. This is multiplied by ABN AMRO's relevant market share. An important limitation is that the degree to which ABN AMRO diverges from the national average, is not included. |
| 35 | **Unintended incidents with personal information** | Occurrence of unintended incidents regarding data and privacy of clients are negative impacts and external costs. | This impact uses data from legal proceedings on the penalties that companies have been made to pay to consumers for data breaches. This is used to proxy damage costs of unintended incidents with personal information. These incidents are categorised, and the damage assessed, using four severity levels - Negligible, Limited, Significant and Substantial. |
| | **Human capital impacts** | | |
| 36 | **Well-being effects of employment** | The increase in well-being of employees caused by employment through i.a., effects on self-esteem, autonomy, social relations, and social status (positive impact when contributing to employment, negative impact when contributing to unemployment). | This impact group consists of the changes in well-being due to employment in ABN AMRO's own operations and in its value chains. For the own operations the average life-satisfaction change caused by employment at ABN AMRO is assessed, partly based on an external source about the general well-being effects of employment.[1] Value chain calculations make use of GID country and sector specific (monetized) data. This impact assumes that all employees with the same reported job satisfaction have the same increase in well-being through work. Additionally, in the value chain portion of the impact an additional negative effect is included which accounts for the decrease in well-being caused by job loss as a result of bankruptcies at ABN AMRO's lending clients. This impact uses the number of bankruptcies in the Netherlands and the average number of employees per company to estimate job loss due to bankruptcy. To assign responsibility of this effect to banks, and ABN AMRO specifically, the percentage of the average companies' payments that are made to banks and the market share of ABN AMRO in the SME market is used. This effect is limited in scope as it only covers loss of well-being from job loss and only if the company goes bankrupt. Job loss due to mass layoffs and other financial difficulties are not in scope nor are effects such as well-being loss from stress caused by job uncertainty. |
| 37 | **Creation of human capital** | Increases in the expected generated value added of employees due to an increase in productivity as a result of working at the organisation. | The creation of human capital of ABN AMRO employees is assessed by first calculating and summing the future growth of earnings that are enabled through this year's training and on-the-job learning. This is done by measuring the promotions that employees made, and the higher salaries involved. Higher salaries are then assumed to correlate with higher productivity and contribution to the value creation of other stakeholders. This impact assumes that human capital created due to ABN AMRO will be as valuable to future employers as it is to ABN AMRO. Additionally, human capital creation at employees in ABN AMRO's value chain is assessed through the GID's country and sector specific (monetized) data. |

[1] ESS6, (2012); ESS9, (2018).

| Nr | Impact group | Description | Approach |
| --- | --- | --- | --- |
| 38 | **Value of employee time spent on work** | The value of the time employees spent on work, which represents a negative (opportunity) cost for employees, as during the time they work they cannot do other valuable activities. | The value of the time ABN AMRO employees spend on their work, is based on studies at the willingness-to-pay for free time[1], corrected for the salary levels. |
| 39 | **Value of services provided by suppliers** | Value of services purchased by the organisation, which represent (predominantly) negative changes of human capital for the suppliers of the services. | The value to the suppliers of the services they deliver to ABN AMRO, is equal to or smaller than the corresponding payments. Impacts in this group are modelled assuming equality. This impact group consists of the sum of expenses related to services, as reported in the Income Statement. |
| 40 | **Occupational health and safety incidents** | Fatal and non-fatal occupational incidents and diseases in the workplace constitute negative impacts and external costs. This applies both to occurrences at the organisation (direct impacts) and to occurrences in the value chain (indirect impacts). | This impact groups consists of the incidents in ABN AMRO's own operations and value chains. Own operations calculations measure the average life lost due to physical and mental diseases attributable to the workplace. Value chain calculations make use of GID country and sector specific (monetized) data. The accuracy of this impact is limited by the quality of recording of certain health and safety incidents, averaging many of them together in a single category. |
| 41 | **Effect on health and safety due to Covid-19** | Covid-19 related illness in the workplace is a negative impact for employees. Further, the spread of the virus from those employees to other members of society represents a negative impact for Society. | This impact group consists of incidents of Covid-19 contracted at the office by ABN AMRO employees and the "avalanche effect" of society members who contract the virus from the infected employees. The employee incidents calculation uses external data on the number of infections that occur in office locations and data on the occupancy of ABN AMROs offices (versus working from home) to estimate potential infections in the office. The avalanche effect uses these office infections and data on the reproduction rate of the virus to estimate how many additional infections this could lead to (directly and indirectly). The accuracy of this impact is limited by the quality of available external data on Covid-19 (for example, infections in the Netherlands are probably underreported, especially in the early months of the pandemic) and the effects of Covid-19 on health (the long-term health effects of Covid-19 are not yet fully known). Additionally, this impact only includes Covid-19 cases reported in 2021. Cases that occur in 2022, as a result of cases contracted in 2021, are out of scope of this impact in 2021 but can be included in the next year. |
| | **Social capital impacts** | | |
| 42 | **Decrease in cash-related crime** | Decrease of harms from robberies and fraudulent banknotes of clients due to the provision of a digital payment infrastructure (positive impacts). | This impact group first assesses the amount of cash-related crime and the resulting losses from it in the Netherlands as a whole. Given that already a majority of payments occur digitally, it is assumed that this trend to digital has reduced the cash-related crime. The total damage prevented is estimated through the ratio between cash and digital payments. Of the total benefit, ABN AMRO is attributed a part in line with its market share. The accuracy of the impact is limited by the quality of the data points. |
| 43 | **Change in brand value and customer loyalty** | Changes in brand value and customer loyalty represent changes in the social capital of the organisation as these are assets that help the organisation to attract and retain customers and employees. | This impact group consists of the sum of the change in calculated brand value compared with the previous year[2] and a part related to the change in NPS score of retail and private banking. In the latter, the change in NPS score is multiplied by the number of ABN AMRO customers and an assessment of how valuable a loyal customer is to the bank. This impact is limited by the data quality and by the simplification that the attraction and retention of wealthy clients is given the same weight as that of less wealthy clients. An important assumption is that this impact group can be reported separately from the financial capital impacts (although both have a potentially overlapping effect for investors). A 50% internalisation parameter is added to account for the overlap and the internalisation of this effect in the change in share price. The scope of the customer loyalty impact is limited to retail and private banking clients. |

[1] Verbooy et al., (2018).
[2] BrandDirectory, (2021).

| Nr | Impact group | Description | Approach |
|---|---|---|---|
| 44 | **Gender inequality** | Gender inequality refers to unequal access to highly skilled jobs or unequal pay on the basis of gender. A gender pay gap at the company in scope (direct impact) or as an indirect impact constitutes a negative impact and an external cost. | There are three components to this impact. The first relates to the Employees stakeholder group and measures the gap in pay between the average male and female FTE (full-time employee) at the bank.. The second relates to the Society group and measures the unequal access to jobs at the bank for females in the Netherlands. The third also relates to the Society stakeholder group and assess gender inequality in the value chain. This is calculated by first mapping upstream and downstream activity to sectors and countries sourced from or invested in. The mapping is then multiplied by the GID country-specific (monetized) data of gender inequality per euro sourcing or investment and summed over sectors and countries. The second and third component are summed together to get the total gender inequality impact for society. |
| 45 | **Underpayment** | Underpayment means that employees earn less than a living wage, which is required for a decent standard of living, including as an indirect impact. This constitutes a negative impact and an external cost. | This is calculated by first mapping upstream and downstream activity to sectors and countries sourced from or invested in. The mapping is then multiplied by the GID country-specific (monetized) data of underpayment per euro sourcing or investment and summed over sectors and countries. This impact is modelled on the assumption that it occurs primarily due to value chain members and not the own operations of the ABN AMRO. |
| 46 | **Child labour** | The presence of child labour (beyond the legal or international limits), including as an indirect impact. This constitutes a negative impact and an external cost. | This is calculated by first mapping upstream and downstream activity to sectors and countries sourced from or invested in. The mapping is then multiplied by the GID country-specific (monetized) data of child labour per euro sourcing or investment and summed over sectors and countries. This impact is modelled on the assumption that it occurs primarily due to value chain members and not the own operations of ABN AMRO. |
| 47 | **Forced Labour** | Forms of employment where the worker has not offered themselves voluntarily or does not have the freedom to leave voluntarily. This occurs in the value chain of the bank (negative impact for society). | This is calculated by first mapping upstream and downstream activity to sectors and countries sourced from or invested in. The mapping is then multiplied by the GID country-specific (monetized) data of forced labour per euro sourcing or investment and summed over sectors and countries. This impact is modelled on the assumption that it occurs primarily due to value chain members and not the own operations of ABN AMRO. |
| 48 | **Financial distress due to difficulties to repay loans** | Stress clients experience as a result of payment difficulty related to loans, which is a negative impact. | In this Impact Report, the scope is limited to ABN AMRO's mortgage clients. The impact group is measured by multiplying the decline in life satisfaction of adults that are in financial distress with an assessment of the number of clients that this applies to, based on ABN AMRO data and an estimate of the number of family members that also experience the stress. This impact is modelled on the assumption that this financial distress is directly related to the mortgage. There is no explicit comparison to the financial difficulty that would occur in the reference. |
| 49 | **Social benefits of home ownership** | Value of increase in well-being and other social benefits related to home ownership, which is a positive impact. | The impact group is calculated by multiplying the reported life-satisfaction increase due to owning a home[1] to the number of people with an outstanding ABN AMRO mortgage, with a correction for the share of mortgage that has already been paid off. The external data point used limits to the quality of the result in proportion to the validity of the data source. |
| 50 | **Risk of contributing to money laundering** | Indirect impact of organised crime as a result of money laundering (negative impact for society). | Money laundering services are an integral part of the the organised crime system as a large portion of the proceeds of organised crime is laundered through the financial system.[2] The approach assumes then that the organised crime industry is indirectly part of the value chain of banks in the financial system. The social and financial impact of organised crime is estimated and a portion attributed to the bank. |

| Nr | Impact group | Description | Approach |
|---|---|---|---|
| | **Natural capital impacts** | | |
| 51 | **Contribution to climate change** | The contributions to climate change through the emissions of greenhouse gasses, which negatively affect people and ecosystems. These contributions constitute negative impacts and external costs. | This impact group calculates and monetizes carbon emissions related to ABN AMRO's own operations, its mortgages portfolio (through the indirect stimulation of construction and from the energy use by homes in the mortgage portfolio) and of its value chains (including those sectors and countries sourced from or invested in). The calculations for the value chain make use of GID country- and sector-specific data for those sectors and countries sourced from or invested in. The monetary value of the impact has a strong dependence on the monetization factor, the so-called carbon abatement cost. |
| 52 | **Use of scarce materials** | Use of mineral and fossil fuel resources makes them unavailable to other users. These contributions constitute negative impacts and external costs. | This impact group is measured by calculating and monetizing the energy natural gas and electricity use of ABN AMRO's own operations, its mortgages portfolio (through the indirect stimulation of construction and from the energy use by homes in the mortgage portfolio) and of its value chains (including those sectors and countries sourced from or invested in). The calculations for the value chain make use of GID country- and sector-specific data for those sectors and countries sourced from or invested in. This only includes the subset of potentially scarce materials that is regularly reported on such as copper and bauxite; reliable data for other materials (e.g., rare earth metals and helium) is not available |
| 53 | **Air pollution** | Negative impacts on air quality (e.g. due to the emissions of pollutants) constitute negative impacts and external costs. | Air pollution is a negative impact measuring the amount of air quality degradation caused by ABN AMRO's own operations, value chains, and construction of mortgaged homes. These values are calculated separately; construction is offset against a proportional rental sector comparison; air pollution from own operations is calculated using emissions reported in the Non-financial data & Engagement report. A selection of pollutants is in scope for which data is available both on emissions and for valuation. The calculations for the value chain make use of GID country- and sector-specific data for those sectors and countries sourced from or invested in. |
| 54 | **Water pollution** | Negative impacts on water quality (e.g. due to the emissions of pollutants) constitute negative impacts and external costs. | This is calculated by first mapping upstream and downstream activity to sectors and countries sourced from or invested in. The mapping is then multiplied by the GID country-specific (monetized) data of water pollution per euro sourcing or investment and summed over sectors and countries. A selection of pollutants is in scope for which data is available both on emissions and for valuation. This impact is limited by the fact that own operations of the company are not in scope. |
| 55 | **Use of scarce water** | Use of scarce water resources makes them unavailable to other users. This constitutes a negative impact and external cost. | This is calculated by first mapping upstream and downstream activity to sectors and countries sourced from or invested in. The mapping is then multiplied by the GID country-specific (monetized) data on use of scarce water per euro sourcing or investment and summed over sectors and countries. Water use from own operations of the company – mainly in the Netherlands where water is not scarce – is not in scope. |
| 56 | **Land use** | Land use looks at the impact of historical land transformation from an original state with high natural capital value to a state with lower value. This constitutes negative impacts and external costs. | This is calculated by first mapping upstream and downstream activity to sectors and countries sourced from or invested in. The mapping is then multiplied by the GID country-specific (monetized) data on land use per euro sourcing or investment and summed over sectors and countries. Land use from own operations of the company is not in scope. |
| 57 | **Limitation of climate change through certificates** | The reduction of external greenhouse gas emissions (i.e., for which the organisation is not responsible for in the first place) through buying certificates. This limits climate change and is a positive impact. | This impact group measures the amount of harmful emissions offset through the purchase of green certificates. It is calculated by summing and monetizing the amount of certificates purchased by ABN AMRO, as reported in the Non-financial data & Engagement report. |

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