

Beneficial Owners based on ownership

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1 About

This White Paper focuses on the technical aspects related to identifying beneficial owners based on ownership. Board members, CEOs, founders etc are in some situations also defined as beneficial owners, but this is outside the scope of this paper. Problems related to nominee accounts, treating family members as a unit etc are also outside the scope of this paper.

For simplicity, we talk about *shareholders* and *shares*, but the discussion should be equally relevant for all legal arrangements owned by natural and/or legal persons as long as the ownership can be quantified.

The paper is organized as follows:

Chapter 2 gives a quick introduction to some concepts needed for understanding the various ways of identifying beneficial owners.

Chapter 3 takes a brief look at guidelines given by different bodies.

Chapter 4 looks at different ways beneficial owners, up to now, have been identified.

In Chapter 5, we introduce a new, and in our view, better way to identify correct beneficial owners.

The consequences of the different approaches are probably easily understood by studying the examples.

2 Introduction

Identifying beneficial owners has become more and more important as the fight against money laundering and terrorist financing has gained a lot of focus internationally. FATF (Financial Action Task Force), OECD and the European Union all give guidance concerning which entities should be obligated to identify beneficial owners of their customers, and to a certain extent, criteria for identifying the beneficial owners of a company. Most countries in the world have some kind of national legislation related to beneficial ownership.

Unfortunately, the definition of beneficial owner varies from country to country. The definitions are also, in general, hard to understand and vague. Finally, and worst, most definitions of beneficial owners do not appoint the correct natural persons as beneficial owners, if we look to the intention behind the laws.

Before we dig deeper into the definitions, let's take a step back and consider what it means to own or control a company.

As a shareholder in a company, you will, in general, have two kinds of rights: 1) Cash rights and 2) Voting rights.

The term *cash rights* refer to the right to share in profitability, through dividends, liquidation or sale of the company. The values generated by a company should at some stage reach its owners – divided according to share distribution.

Voting rights refers to the right to vote at the General Assembly, and through that, influence major decisions for the company.

Unlike cash rights, the level of *power* given by a certain share percent is not given by the ownership percentage alone, but is highly dependent on the distribution of the other shares.

If company *A* is owned by shareholder *B* with 30% and shareholder *C* with 70%, then shareholder *B* has no power at all.

If company *A* is owned by shareholder *B* with 30%, and 70 other shareholders with 1% each, then shareholder *B* has a very high degree of power – in fact – *B* has a 99.97% chance of being pivotal for the

outcome of a vote, given that all shareholders are present and that no coalitions exists among shareholders. For an introduction to how shareholder power could be calculated, we recommend our white paper *Shareholder Power and Control*[1].

In general, neither cash rights nor voting rights need to be equally distributed among shares. Sometimes, there are several share classes, where just one or some of them have voting rights, or one share class could have a different number of votes per share than another class. Similarly, the rights to receive dividends could be reserved for some share classes, or in other ways unequally distributed among the classes. Shareholder agreements could also come to play, giving special rights to some parties.

In such cases, the ownership distribution will be different when calculating shareholder power than when calculating cash rights. For the principles discussed in this paper, this makes no difference, and for the rest of the paper, we assume that both voting rights and cash rights are equally distributed among shares.

3 Beneficial Owner definitions

3.1 FATF

FATF defines a beneficial owner like this[2]:

Beneficial owner refers to the natural person(s) who ultimately owns or controls a customer and/or the natural person on whose behalf a transaction is being conducted. It also includes those persons who exercise ultimate effective control over a legal person or arrangement.

Owns in the definition above corresponds to what we have called cash rights, while *control* is more in the direction of voting power (but also other kinds of control, outside the scope of this paper).

FATF does not provide any thresholds for how much someone should own in order to be considered a beneficial owner, but leave that decision to its members. Nor is there any precise definition of control. They do however give some examples of what could be considered control – one of them being an ownership threshold of 25%.

3.2 European Union

The fourth anti-money laundering directive[3] give the following definition:

‘beneficial owner’ means any natural person(s) who ultimately owns or controls the customer and/or the natural person(s) on whose behalf a transaction or activity is being conducted and includes at least:

(a) in the case of corporate entities:

(i) the natural person(s) who ultimately owns or controls a legal entity through direct or indirect ownership of a sufficient percentage of the shares or voting rights or ownership interest in that entity, including through bearer shareholdings, or through control via other means, other than a company listed on a regulated market that is subject to disclosure requirements consistent with Union law or subject to equivalent international standards which ensure adequate transparency of ownership information.

A shareholding of 25 % plus one share or an ownership interest of more than 25 % in the customer held by a natural person shall be an indication of direct ownership. A shareholding of 25 % plus one share or an ownership interest of more than 25 % in the customer held by a corporate entity, which is under the control of a natural person(s), or by multiple corporate entities, which are under the control of the same natural person(s), shall be an indication of indirect ownership. This applies without prejudice to the right of Member States to decide that a lower percentage may be an indication of ownership or control. Control through other means may be determined, inter alia, in accordance with the criteria in Article 22(1) to (5) of Directive 2013/34/EU of the European Parliament and of the Council;

...

As we can see, the definition starts out very similar to the FATF definition – ...ultimately owns or controls.... EU then introduces some criteria that its member states, as a minimum, must meet: If a

natural person has direct ownership above 25%, or controls entities which in sum hold over 25% of the ownership in a company, this must be taken as an *indication* of beneficial ownership.

The directive does not give an exact definition of control, but refers among others to *the criteria of control used for the purpose of preparing consolidated financial statements*.

This minimum requirement points more towards control than ownership. A person may indirectly own next to nothing in a company *A*, but still control companies that in sum own above 25% in *A* - thus becoming a beneficial owner according to EU's directive. On the other hand, a person may indirectly own almost the whole company, without meeting the criteria.

From a control perspective, the 25% threshold is not a good indicator for power – it could mean anything from no influence at all to de facto control. Another peculiarity about the minimum criterion is that a person could become a beneficial owner of a company, without becoming beneficial owner of a 100% owned subsidiary of the same company. In Chapter 4.1, we will look at examples illustrating these weaknesses of the minimum criterion.

The shortcomings of the definition is probably caused by a combination of the fact that, who, in the end, is in a position to highly influence the decisions of a company is dependent on a number of different factors, and the lack of a methodology for measuring the power of (in)direct shareholdings.

3.3 National legislation

All EU/EEC member states are required to implement the fourth anti-money laundering directive in their national legislation. Most of the other countries in the world also have national legislation concerning beneficial ownership.

Traditionally, most countries have either defined beneficial owners by means of the so-called top-down approach or the so-called bottom-up approach.

The top-down-approach is about calculating cash rights, see Chapter 4.2 for details.

The bottom-up-approach is more about control – how many percent of the voting rights a natural person is controlling, see Chapter 4.1 for details.

In general, there seems to be a move from the top-down to the bottom-up approach or a combined approach.

Going into country-specific legislation is beyond the scope of this paper. We will only mention the new Norwegian and Swedish¹ legislation. These countries have chosen a common approach to the new EU directive, which in this paper is called the recursive approach. In short, they say that owning more than 25% or controlling more than 25% of the voting rights in a company implies that you are a beneficial owner. Then they redefine control to mean that you control a company if you are a beneficial owner of it, meaning that if you, together with the companies you are beneficial owner of, together own more than 25% of another company, you are also beneficial owner of this company, and so on. This could lead to a high number of beneficial owners with marginal ownership and marginal/no influence at all, and at the same time leaving owners with a high degree of power outside the definition. See Chapter 4.3 for details.

4 Current used methodologies

In this chapter, we will introduce the most common approaches, used by practitioners and the systems they use.

4.1 The Control approach

What we call *the control approach* is often referred to as the *bottom-up approach*. The idea behind this approach is that if a natural person control the voting of a certain percentage of the votes in a company, he or she could influence the company to act on his/her behalf.

From a technical point of view, it could be argued that *top-bottom* would be a better name for this approach than *bottom-up*. Control/influence/power flows from a natural person downwards in the ownership tree. If a person owns two companies, *A* and *B*, with 51% each, he or she controls both these companies. If both *A* and *B* further each has a 26% ownership in a company *C*, the natural person also controls *C* since he in sum is in control of more than 50% of the votes (52%). Reading the ownership tree bottom-up, this is harder to figure out since there is no link above 50% pointing into *C*.

¹According to draft guidelines from SIMPT (www.simpt.se), Sweden seems to be on the way to introduce some flexibility around the identification of beneficial owners, where obliged entities may choose between a number of different approaches

An ownership of 50% + 1 share is usually considered to be sufficient for having control. However, it is a well known fact that someone with less than 50% could be considered to have *de facto control*, if the other shareholdings are widely dispersed. For example, if a shareholder has as little as 10%, he or she will have a *voting power*² of 99.91% if the rest of the shares are distributed equally among 900 other shareholders (1‰ each).

The minimum requirement set forth in the 4th EU AML directive is in line with the control approach.

The main shortcoming of the control approach, is that a fixed threshold for the percentage of controlled voting rights, as long as the threshold is below 50%, is a bad indicator of shareholder power.

Another shortcoming is that a person may have arbitrarily close to 100% of the cash rights in a company, without controlling any voting rights. If the *owns* part of the beneficial owner guidelines are to be met, the control approach must be combined with another approach.

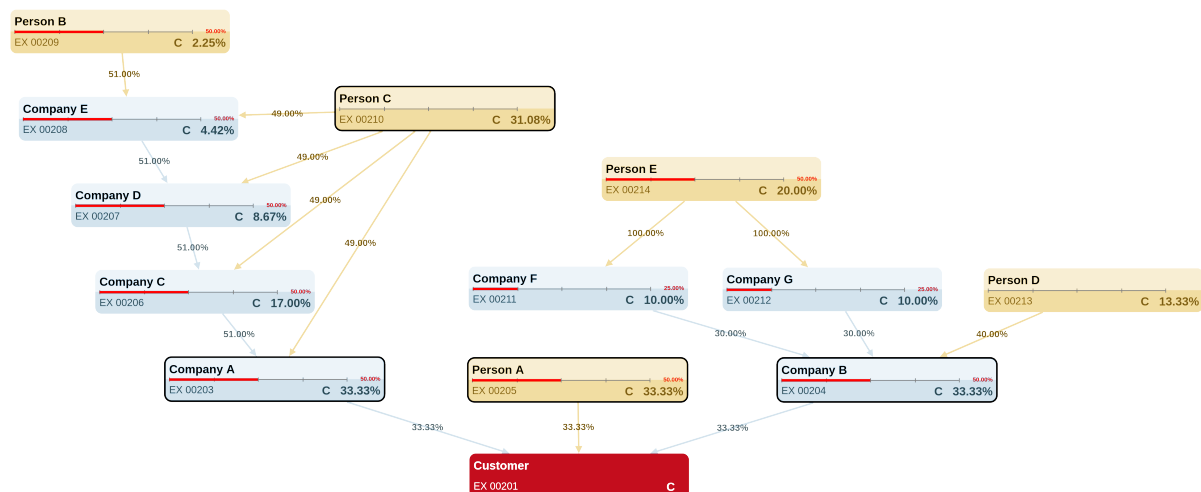


Figure 1: A customer with three beneficial owners according to the control approach: Person A, Person B and Person E. The arrows with corresponding labels represent direct shareholdings. The big numbers inside the nodes are their calculated integrated ownership in the red node. The red bars inside the nodes, with corresponding red numbers, represent the calculated voting power this node has in the red node.

Example 4.1. If we look at Figure 1, using the control approach, we will find that the company we are looking at, Customer, has three beneficial owners.

Person A owns 33.33% directly, meaning that he controls more than 25% of the votes.

Person B controls, through a controlled chain of companies, the company Company A, which in turn holds 33.33% of the voting rights in Customer. Person B thus controls 33.33% of the voting rights and is a beneficial owner, even though he has an integrated ownership of only 2.25%.

Person C has an integrated ownership of 31.08%. However, he does not control any company, nor does he have any direct shareholdings in Customer. Thus, he controls no voting rights and is not a beneficial owner.

Person D, like Person C, controls no companies and has no direct shareholdings in Customer, and is not a beneficial owner.

Person E controls both Company F and Company G. These companies together control Company B which has 33.33% of the voting rights in Customer. Thus, Person E is a beneficial owner.

²voting power in this paper refers to T-rank's methodology for calculating shareholder power[1]. If a shareholder has X% voting power, it means that in X% of all the different ways the shareholders may vote, the shareholder in question would change the outcome of the vote if he or she flipped his/her vote.

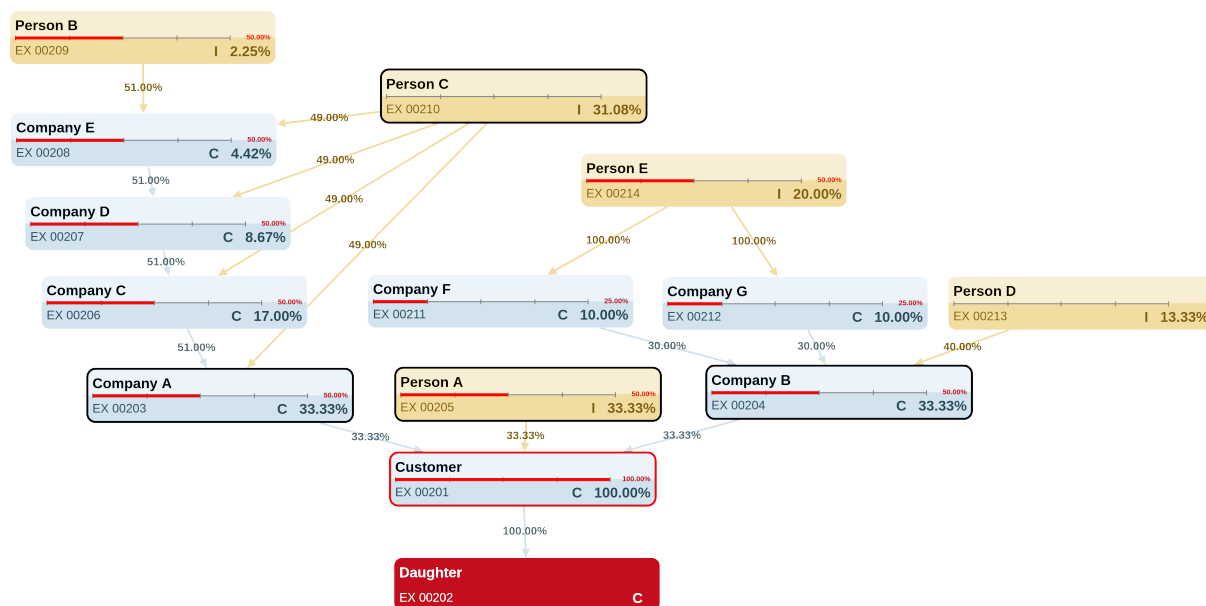


Figure 2: Applying the control approach naively, *Daughter* has no beneficial owners

Example 4.2. In Figure 2, we have the same ownership structure as in Figure 1, the only exception being that now we are looking at a daughter company of Customer. We see that Customer controls all voting rights in Daughter. Also, Customer has 3 beneficial owners, each of whom controls 33.33% of voting rights in Customer. Thus, none of these beneficial owners controls Customer. Therefore, using the control approach, none of them controls any voting rights over Daughter – none of the natural persons become beneficial owners of Daughter.

This really makes no sense, since the ultimate owners, in general, will have the same saying in Daughter as in Customer. As a consequence, people using the control approach, should make sure to include beneficial owners of any company controlling a customer.

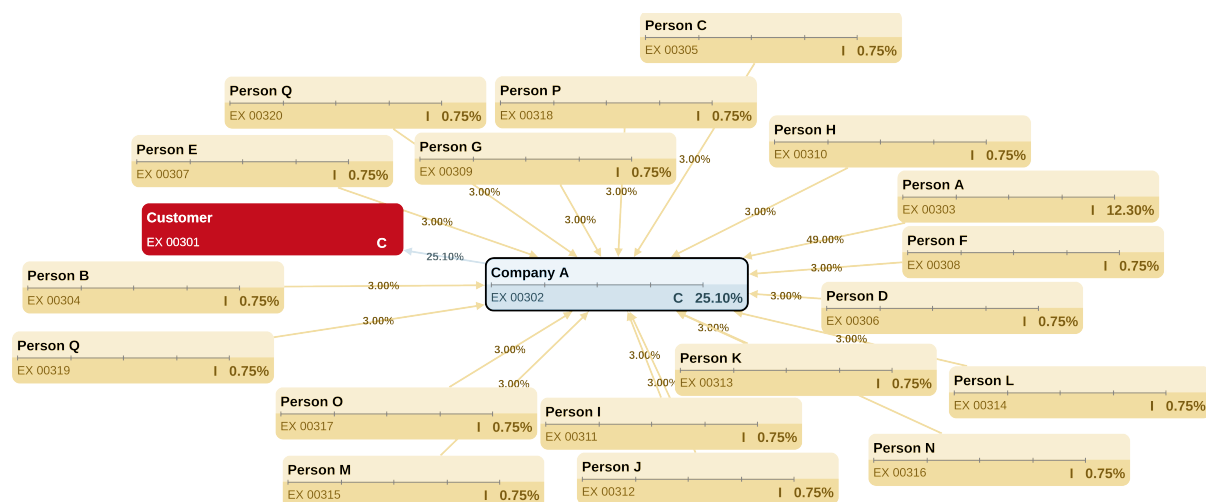


Figure 3: Beneficial ownership through de facto control – Person A should be considered a beneficial owner of Customer

Example 4.3. In Figure 3, Company A has 25.1% of the voting rights in Customer. Hence, if a natural person controls Company A, he or she will be beneficial owner of Customer. None of the natural persons have more than 50% of the shares in Customer. However, Person A has 49% of the shares, and the rest of the shares are divided equally among 17 shareholders, having 3% each. There is a total of 2^{18} ways the 18 shareholders may vote. Of these, there are only 4 cases where Person A would not have been able to change the decision if he changed his/her vote – all shareholders vote yes, all shareholders vote no,

all but Person A vote yes, all but Person A votes no. This means that Person A has a voting power of $(2^{18} - 4)/2^{18} = 99.9984\%$. Clearly, this should be treated as *de facto* control, implying that Person A is a beneficial owner of Customer according to the control approach.

4.2 The Integrated Ownership approach

Integrated ownership is also often referred to as *total ownership* or *cash rights*. A shareholder's integrated ownership in a company is the sum of his or her direct and indirect ownership in the company.

The integrated ownership approach is sometimes called the *top-down approach*. In reality, *bottom-up* would have been a better name, since this approach is really about calculating cash rights, and the profit generated by a company flows from the company upwards to its ultimate owners.

If A owns 60% of B, and B owns 40% of C, A will have an integrated ownership of $60\% \times 40\% = 24\%$ in C. If there are several ownership paths going from A to C, these are summed up to give the integrated ownership. If C has a, direct or indirect, self ownership, the integrated ownership of A in C is adjusted for this, since A also owns his/her share of the self ownership. Our white paper, Indirect Ownership Calculation[4], explains the details of integrated ownership calculation.

The integrated ownership approach will give an exact answer to which natural persons own a major stake in a company, but will give no final answer as to who is controlling / has power in the company.

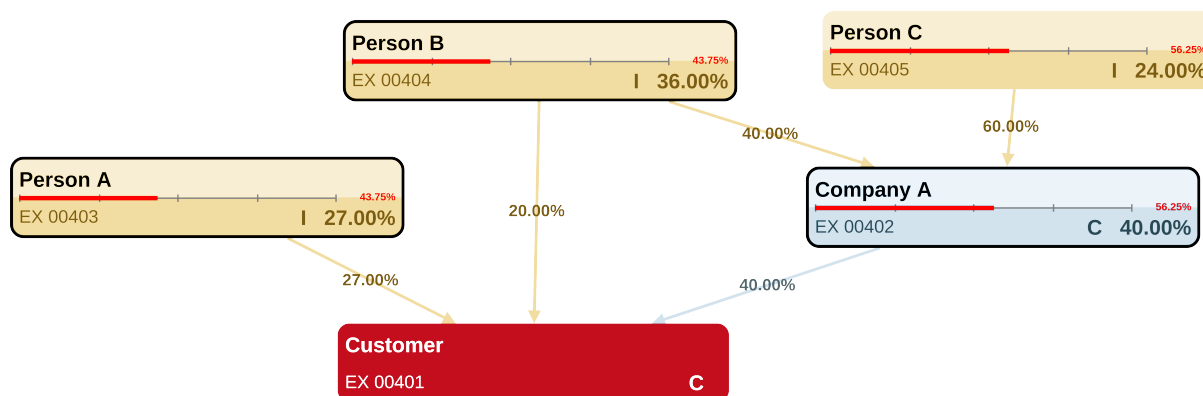


Figure 4: 2 beneficial owners found by integrated ownership approach – Person A and Person B

Example 4.4. In Figure 4, both Person A and Person B have an integrated ownership above 25% and are therefore found to be beneficial owners by the integrated ownership approach. Person C is just below the threshold. Note that Person C controls Company C, and thus would have been defined as Beneficial owner by the control approach. Person B controls only 20% of the votes, and would not have been a beneficial owner using the control approach.

The natural persons in sum have an integrated ownership of 87%. That means that even if the shareholder map is not complete, we know that there is not room for another unknown beneficial owner – lacking only 13% of the shares. However, it could be that Person C is a beneficial owner, if he has additional ownership in Customer through another, unknown path.

Example 4.5. In Figure 1, Person A and Person C will be beneficial owners according to the integrated ownership approach.

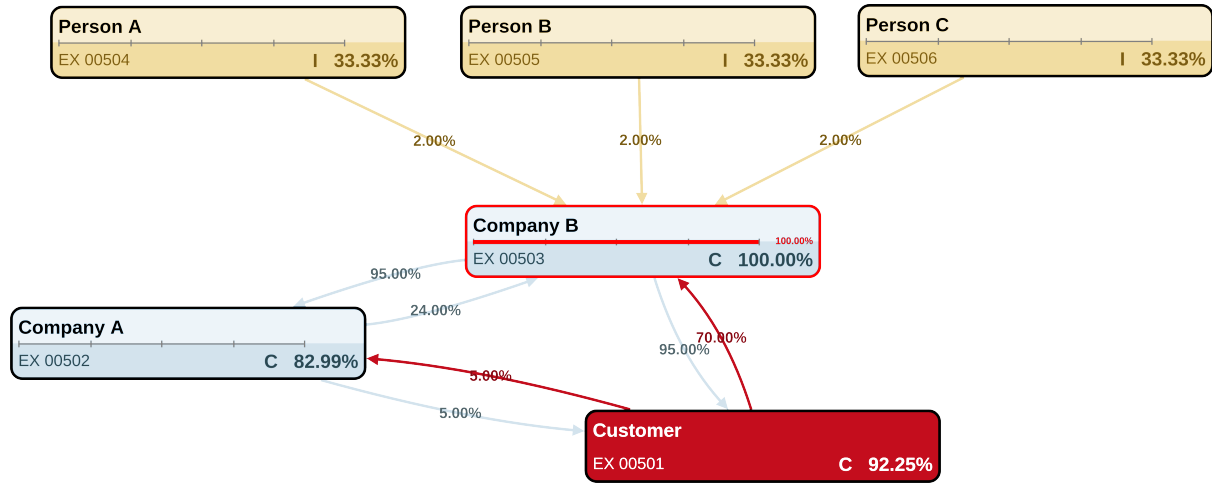


Figure 5: Implications of circular ownership

Example 4.6. In Figure 5, which is an anonymized real world example, there are three companies with a lot of cross ownership. The consequence is that Customer has an integrated self ownership of 92.25%. Besides the cross ownership, the only outstanding shares are divided among three natural persons, owning 2% each in the group mother company – Company B. Since the natural persons are the only ultimate owners, they end up with an integrated ownership of 33.33% each and are all beneficial owners of all the companies in the group according to the integrated ownership approach.

4.3 The Recursive approach

The recursive approach is used in Norwegian and Swedish legislation. It could be looked at as a variation of the control approach, where control is defined as owning more than 25% or controlling more than 25% of the voting rights in a company.

The companies for which a natural person, A , is Beneficial Owner of, may be found using the following procedure:

1. Identify all companies in which A owns more than $threshold\%$, or more than $threshold\%$ of the voting rights. A is beneficial owner of these companies
2. Identify all companies where A , together with all companies A is found to be beneficial owner of, owns more than $threshold\%$ or controls more than $threshold\%$ of the voting rights in, and add these companies to the list of companies A is beneficial owner of.
3. Repeat previous step until no more companies are found.

A nice feature of this approach is that if you know the direct shareholders of a company, and you know the beneficial owners of each of the direct shareholders, you may also deduce the Beneficial Owners of the company.

However, the shortcomings are obvious. We will get beneficial owners with marginal ownership and no power at all, and at the same time – like the control approach – we will miss powerful owners.

When using the recursive approach, direct and indirect self ownership should be taken into account. If a person owns a company by 2%, and the company owns itself by 98%, the person should obviously be looked at as a beneficial owner. Justifying ownership for self ownership is not in general trivial. If the integrated ownership for the whole ownership graph has been calculated, the following formula can be used:

$$J_{A \rightarrow B} = \frac{O_{A \rightarrow B}}{(1 - (I_{B \rightarrow B} - I_{B \rightarrow A} \times O_{A \rightarrow B}))} \quad (1)$$

where $J_{X \rightarrow Y}$ is X 's justified ownership in Y , $O_{X \rightarrow Y}$ is X 's direct ownership in Y and $I_{X \rightarrow Y}$ is X 's integrated ownership in Y .

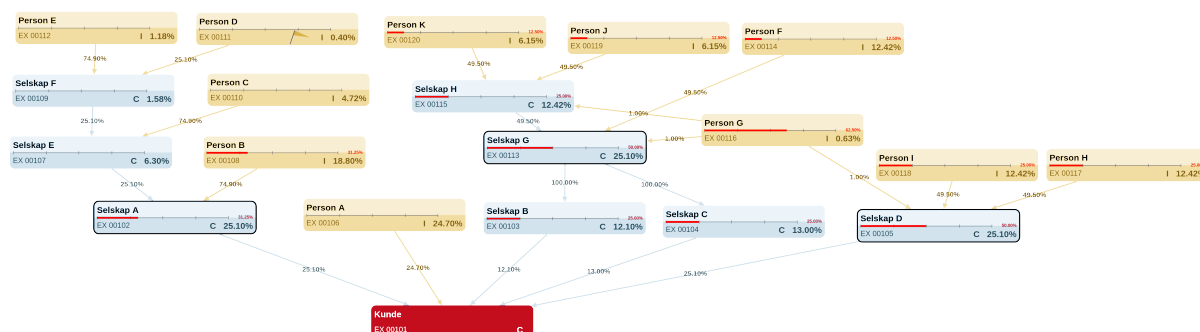


Figure 6: Recursive approach lead to wrong Beneficial owners.

Example 4.7. Figure 6 is an illustration of how badly the recursive approach may behave. Person K is a beneficial owner of Customer, since he is beneficial owner of Company H, then Company G, then Company B and Company C, and finally in Customer since Company B and Company C in sum own more than threshold% (25%) in Customer.

In fact, all persons except A and G will become beneficial owners of Customer according to the recursive approach. However, Person A is the person having the highest integrated ownership (just below the threshold), and Person G is the one with, by far, the most voting power in Customer (62.50%).

If one looks to the intention behind the beneficial owner definitions, Person G should probably be beneficial owner due to his voting power. Person B is also a candidate. He controls more than 25% of the voting rights. However, his voting power is reduced due to the fact that Company B and Company C will act as a coalition due to common ownership, and also the fact that Company D will more often than randomly vote together with Company B and Company C based on a common influential shareholder. On the other hand, Person B has an integrated ownership above the threshold, which is an argument for including him in the list of beneficial owners.

Person D has an integrated ownership of only 4%, and has no power whatsoever in Customer – still, he becomes a beneficial owner according to the recursive approach.

To sum up, the recursive approach appoints a lot of irrelevant beneficial owners, and misses the natural person that most clearly should have been appointed.

5 A proposed, new approach

Despite the strong focus on control, or shareholder power, the regulators have so far not been able to come up with good guidance on who should be considered beneficial owners. As we have seen, a low shareholding – even below 10% – could be considered de facto control. On the other hand, a shareholding of 49.99% will lead to no power if another shareholder holds 50.01%.

The most common threshold for controlled voting rights seem to be 25%, albeit 10% is also sometimes used – especially if we are looking at a high risk customer. It is difficult to find arguments for these specific thresholds, and they were probably established based on some gut feeling regarding what ownership is needed in most situations to gain more or less de facto control.

T-rank has developed a methodology for measuring shareholder power and control. This is of course not the only possible methodology, but our (and similar) methodologies, could be used to, in a far better way than the established practices, discover who should be, or who should be considered to be, beneficial owners.

Not only those that de facto control a company should be appointed as beneficial owners, but also natural persons that to a high extent are in a position to influence the decisions of a company. If we look at the 25% threshold, a reasonable voting power threshold would be 50%. If we have three shareholders holding 25.1% each, and a fourth holding 24.7%, the three first shareholders will get 50% voting power each (the fourth will get 0%, since he will never be able to flip any decision).

Another example of 50% voting power is a situation where we have three shareholders with none of them having majority ownership – 49%, 48% and 3%. Since none of them have majority alone, but any pairs of shareholders will have the majority, they all have the same amount of voting power – 50%.

A good Beneficial owner definition must also cater for the *owns* part of the FATF guidelines and EU directive. Integrated ownership is a well established method for measuring ownership.

Hence, we propose the following definition for Beneficial ownership:

Definition 5.1. *A natural person is a beneficial owner of a company if he or she*
a) has an integrated ownership above 25%, and/or
b) is in a position to flip important votes at General Assemblies at least 50% of the time

In a legal framework, the definition above would have to be extended to cope with legal arrangements without owners, family members, other means of control etc.

Applying Definition 5.1 on our previous examples yield the following results:

Example 5.1. *Figure 1: Person A (voting power and integrated ownership), Person B (voting power), Person C (integrated ownership) and Person E (voting power) will be beneficial owners.*

Example 5.2. *Figure 2: Identical to previous example. Note that our approach, unlike the control approach, does not have any problems related to daughter companies.*

Example 5.3. *Figure 3: In this example, we have only identified 25.10% of the voting rights in Customer. It doesn't make much sense to calculate voting power in such situations, since the voting power is highly dependent on the distribution of the remaining 74.90%. If Company A has a voting power of at least slightly above 50% in Customer, Person A will be beneficial owner. Based on integrated ownership, none of the known ultimate owners are beneficial owners.*

Example 5.4. *Figure 4: Person A and Person B become beneficial owners based on integrated ownership, Person C based on voting power.*

Example 5.5. *Figure 5: All natural persons become beneficial owners based on integrated ownership. If T-rank's algorithm for suspicion of voting power for entities owning into strongly connected components³, they will also become beneficial owners based on voting power – having 50% each.*

Example 5.6. *Figure 6: Person G is the only beneficial owner with a voting power of 62.50%. This might seem strange at first glance, but he will often have decisive power in all of the companies Company D, Company H and especially Company G, and through that, more often than not, have decisive power in Customer.*

6 Conclusion

As we have seen, existing frameworks for determining beneficial owners seem to fail in some situations when it comes to identifying the natural persons who ultimately, through their ownership interests, may influence the decisions of a company.

We propose a new definition of beneficial ownership, Definition 5.1, that in our opinion will mend the detected weaknesses and ease the work of obliged entities.

Our definition is consistent with the intention behind various legislation/guidelines. Beneficial ownership is often defined in vague terms. In order to help obliged entities to establish proper guidelines for whom to consider beneficial owner, authorities often try to operationalize the vague definitions, using simple thresholds of ownership and voting rights. However, the operationalization is often also vague, using terms like "...shall be an indication of...". It is therefore reasonable to assume that obliged entities in most countries can apply better means of identifying beneficial owners than suggested in the legislation, whenever available.

Those who decide to continue to use the control approach, should make sure to include natural persons who control more than *threshold%* of the voting rights in companies controlling the analyzed company. They should also utilize some kind of *voting power* measure in order to disclose de facto control. Finally, the approach should be combined with integrated ownership in order to cover the *owns* part of beneficial ownership definitions. Nevertheless, this approach will miss some influential shareholders.

The integrated ownership approach, alone, is not sufficient to disclose all beneficial owners according to modern standards.

The recursive approach appoints irrelevant beneficial owners, and at the same, misses influential shareholders, and should not be used unless explicitly required by local legislation.

³A *Strongly Connected Component* (SCC) is a subgraph in which any node can be reached from any other node. The three companies in Figure 5 together constitute an SCC

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