



Swedish University of Agricultural Sciences  
Faculty of Natural Resources and Agricultural Sciences  
Department of Economics

# **Landshypotek's intended change of contributed capital**

- A study of the members' attitudes

*Fredrik Grönvall  
Hannes Rydmark*

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- A study of the members' perspective

*Fredrik Grönvall, Hannes Rydmark*

**Supervisor:** Hans Andersson, Swedish University of Agricultural Sciences,  
Department of Economics

**Examiner:** Karin Hakelius, Swedish University of Agricultural Sciences,  
Department of Economics

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Fredrik Grönvall & Hannes Rydmark

# Abstract

Landshypotek is today Sweden's largest lending institution for land and forest owners with loan assets around 50 billion SEK. "Landshypotek AB" is owned by an economic association consisting of 52 000 members and has 19 offices all over Sweden. Its market share of first mortgage loans to land and forest owners is 38 percent. To be a member in Landshypotek ownership of land or forest are compulsory and the members have to place their mortgage in Landshypotek.

Landshypotek's equity for 2010 was barely 3,4 billion SEK which has been built up through patronage refunds on the borrowers (members) interest payments. The members' contributed capital constitutes just over 1 billion of the equity and the rest (2,4 billion) is Landshypotek's unallocated equity. The equity is enough to balance today's lending but since the market is expanding a demand for capital and Landshypotek's future growth strategy more equity is needed. Landshypotek is therefore considering introducing a change in the financial model at the beginning of the year 2012.

In comparison with investor-owned firms, cooperatives are at a disadvantage in raising equity capital. The cooperative equity is not marketable because the distribution of earnings in cooperatives is based on patronage and not investment. As a result there are no incentives for non patrons to invest in a cooperative and cooperatives are therefore restricted to its members to raise equity. But members may be reluctant to increase their illiquid stake in a cooperative because of the non marketability of the equity. The possibility to raise equity through retained earnings may also be met with resistance from the cooperative's members because it translates into higher costs and lower revenues for the patrons.

The aim of the study is to answer the following questions, hence the issue is if Landshypotek's members be negative towards increasing their illiquid stake? Is the intended change of contributed capital likely to reduce the risk of free-rider problems? Are members with a long time left in Landshypotek likely to be more positive towards the intended change of contributed capital than those with a short time left? Will members terminate their business relationship with Landshypotek due to the intended change of contributed capital? How will the intended change of contributed capital affect a member's cost of capital?

The thesis is conducted as a qualitative case study. The empirical material consists of qualitative research interviews with twelve members in Landshypotek and a study of four scenarios regarding the members' cost of capital.

The conclusion is that Landshypotek's members will not be negative towards increasing their illiquid stake. The members, regardless of their expected time horizon, are also positive towards the intended change of contributed capital and the members with long time left in Landshypotek are more positive towards the possibility to actively contribute with capital. The intended change of contributed capital is likely to reduce the risk of free-rider problem. It is also revealed that the members will not terminate their business activities with Landshypotek due to the intended change of contributed capital as long as Landshypotek is meeting the objective of ten percent dividend on contributed capital. Finally, the intended change of contributed capital tends to increase the cost of capital for non investing members and decrease it for investing members.

# Sammanfattning

Landshypotek är idag Sveriges största kreditgivare för jord- och skogsägare med en utlåning omkring 50 miljarder kronor. Landshypotek AB ägs av en ekonomisk förening bestående av 52 000 medlemmar och har 19 kontor i Sverige. Landshypoteks marknadsandel av bottenlån till jord- och skogsägare är 38 procent. Det är ett krav att äga jord eller skog för att erhålla ett bottenlån hos Landshypotek.

2010 var Landshypoteks egna kapital knappt 3,4 miljarder svenska kronor som har byggts upp genom återbäring från låntagarnas (medlemmarnas) räntebetalningar. Medlemmarnas insatskapital uppgår till drygt 1 miljard av det egna kapitaler och de resterande (2,4 miljarder) utgör Landshypoteks fria egna kapital. Det finns tillräckligt eget kapital för att klara dagens utlåning, men pga. marknadens ökande krav på kapital och Landshypoteks framtida tillväxt strategi behövs mer eget kapital. Därför överväger Landshypotek att introducera en förändring i den finansiella modellen med start år 2012.

I jämförelse med aktiebolag, har kooperativa företag en nackdel när det gäller att anskaffa eget kapital. Det egna kapitalet är låst i kooperativet pga. att fördelningen av överskottet är baserad på handeln med kooperativet och inte investeringar. Detta leder till en brist på incitament till att investera i kooperativet för icke medlemmar varför kooperativet är begränsat till medlemmarna för att anskaffa eget kapital. Å andra sidan kan medlemmarna kanske vara motvilliga till att öka sin kapitalandel i kooperativet pga. kapitalet är låst i föreningen. Möjligheten att anskaffa eget kapital genom att ökade marginaler kommer också troligtvis att ogillas av medlemmarna eftersom det innebär högre kostnader och lägre intäkter för medlemmarna.

Målet med denna studie är därför att besvara följande frågor, Är Landshypoteks medlemmar att vara negativa till att öka deras kapitalandelar? Kommer den planerade förändringen av insatskapitalet minska risken med "free-rider" problemen? Är det troligt att medlemmar med lång tid kvar i Landshypotek vara mer positiva till förändringen av insatskapitalet än medlemmar med kort tid kvar? Kommer medlemmar avsluta sina affärer med Landshypotek pga. den planerade förändringen av insatskapitalet? Hur förväntas förändringen av insatskapitalet påverka en medlems kapitalkostnad?

Uppsatsen är genomförd som en kvalitativ fallstudie. Det empiriska materialet består av kvalitativa forskningsintervjuer med tolv medlemmar i Landshypotek och en studie av fyra scenarier angående medlemmarnas kapitalkostnad.

Slutsatsen är att medlemmarna i Landshypotek inte förväntas vara negativa till att öka deras respektive kapitalandelar. Medlemmarna, oavsett deras förväntade tidshorisont, är också positiva till den planerade förändringen av insatskapitalet. Medlemmar med lång tid kvar i Landshypotek är mer positiva till möjligheten att aktivt bidra med kapital. Den planerade förändringen förväntas minska risken med "free-rider" problemen. Det framgår dessutom att medlemmarna inte avser att avsluta sina affärer med Landshypotek pga. den planerade förändringen av insatskapitalet så länge Landshypotek lyckas nå målet med tio procents utdelning på insatskapitalet. Slutligen leder den planerade förändringen av insatskapitalet till en ökning av kapitalkostnaden för medlemmar som inte väljer att investera medan kapitalkostnaden sjunker för de medlemmar som investerar.

# Table of Contents

<b>1 INTRODUCTION.....</b>	<b>1</b>
1.1 BACKGROUND.....	1
1.1.1 <i>Old model</i> .....	4
1.1.2 <i>Distribution of contributed capital</i> .....	5
1.1.3 <i>New Model</i> .....	7
1.2 PROBLEM.....	8
1.3 AIM.....	10
1.4 DELIMITATIONS.....	10
1.5 OUTLINE.....	10
<b>2 THEORETICAL PERSPECTIVE AND LITERATURE REVIEW.....</b>	<b>12</b>
2.1 LITERATURE REVIEW.....	12
2.1.1 <i>“Lantmännen”</i> .....	12
2.1.2 <i>“Södra”</i> .....	13
2.1.3 <i>Similar studies</i> .....	15
2.2 THEORETICAL PERSPECTIVE.....	17
2.2.1 <i>Cooperative</i> .....	17
2.2.2 <i>Property rights</i> .....	17
2.2.3 <i>Cost of capital</i> .....	20
2.3 HYPOTHESES.....	26
<b>3 METHOD.....</b>	<b>28</b>
3.1 CHOICE OF METHOD.....	28
3.2 QUALITATIVE RESEARCH INTERVIEWING.....	29
3.2.1 <i>Interview quality</i> .....	29
3.2.2 <i>Ethics</i> .....	31
3.3 COURSE OF ACTION.....	31
3.3.1 <i>Interview structure</i> .....	32
3.3.2 <i>Selection of members</i> .....	33
3.3.3 <i>Cost of capital</i> .....	34
<b>4 THE EMPIRICAL STUDY.....</b>	<b>36</b>
4.1 QUALITATIVE INTERVIEWS.....	36
4.1.1 <i>Member 1</i> .....	36
4.1.2 <i>Member 2</i> .....	38
4.1.3 <i>Member 3</i> .....	39
4.1.4 <i>Member 4</i> .....	41
4.1.5 <i>Member 5</i> .....	43
4.1.6 <i>Member 6</i> .....	45
4.1.7 <i>Member 7</i> .....	47
4.1.8 <i>Member 8</i> .....	48
4.1.9 <i>Member 9</i> .....	51
4.1.10 <i>Member 10</i> .....	54
4.1.11 <i>Member 11</i> .....	55
4.1.12 <i>Member 12</i> .....	58
4.1.13 <i>Summary of interviews</i> .....	61
4.2 COST OF CAPITAL.....	65
4.2.1 <i>Scenario 1</i> .....	65
4.2.2 <i>Scenario 2</i> .....	66
4.2.3 <i>Scenario 3</i> .....	66
4.2.4 <i>Scenario 4</i> .....	66
4.3 RELIABILITY AND VALIDITY.....	68
4.3.1 <i>Interviews</i> .....	68
4.3.2 <i>Cost of capital</i> .....	69
<b>5 ANALYSIS.....</b>	<b>70</b>

5.1 PROPERTY RIGHTS .....	70
5.2 PORTFOLIO PROBLEM .....	70
5.3 FREE-RIDER PROBLEM .....	71
5.4 HORIZON PROBLEM .....	73
<b>6 CONCLUSIONS .....</b>	<b>75</b>
6.1 WILL LANDSHYPOTEK’S MEMBERS BE NEGATIVE TOWARDS INCREASING THEIR ILLIQUID STAKE? .....	75
6.2 WILL THE INTENDED CHANGE OF CONTRIBUTED CAPITAL REDUCE THE RISK OF FREE-RIDER PROBLEM?.....	76
6.3 WILL MEMBERS WITH A LONG TIME LEFT IN LANDSHYPOTEK BE MORE POSITIVE TOWARDS THE INTENDED CHANGE OF CONTRIBUTED CAPITAL THAN THOSE WITH A SHORT TIME LEFT? .....	76
6.4 WILL MEMBERS END THEIR BUSINESS RELATIONSHIP WITH LANDSHYPOTEK DUE TO THE INTENDED CHANGE OF CONTRIBUTED CAPITAL? .....	76
6.5 HOW WILL THE INTENDED CHANGE OF CONTRIBUTED CAPITAL AFFECT A MEMBER’S COST OF CAPITAL?.....	77
<b>7 DISCUSSION .....</b>	<b>78</b>
7.1 FUTURE RESEARCH.....	79
<b>BIBLIOGRAPHY .....</b>	<b>81</b>
<i>Literature and publications</i> .....	81
<i>Internet</i> .....	83
<i>Personal messages</i> .....	84
<b>APPENDIX 1: FACTSHEET.....</b>	<b>85</b>
<b>APPENDIX 2: INTERVIEW GUIDE .....</b>	<b>87</b>
<b>APPENDIX 3: OLD MODEL .....</b>	<b>94</b>
<b>APPENDIX 4: NEW MODEL, NO ACTIVE CONTRIBUTION .....</b>	<b>95</b>
<b>APPENDIX 5: NEW MODEL, ACTIVE CONTRIBUTION WITH OWN ASSETS .....</b>	<b>96</b>
<b>APPENDIX 6: NEW MODEL, ACTIVE CONTRIBUTION WITH “MEMBER LOAN .....</b>	<b>97</b>
<b>APPENDIX 7: DISTRIBUTION OF CONTRIBUTED CAPITAL IN LANDSHYPOTEK.....</b>	<b>98</b>

# Table of content Figures & Tables

Figure 1. Landshypotek's market share of first mortgage loans to land and forest owners 2010 .....	2
Figure 2. Organizational chart for Landshypotek group .....	3
Figure 3. Organizational chart for governance in Landshypotek .....	3
Figure 4. Landshypotek's lending to the public(members) 2006-2010.....	4
Figure 5. Distribution of Landshypotek's profit in the old model.....	5
Figure 6. Members with different amount contributed capital in relation to their borrowed capital.....	6
Figure 7: Total debt versus contributed capital in relation to debt.....	7
Figure 8. Distribution of Landshypotek's profit in the new model without an active contribution of capital .....	8
Figure 9. Distribution of Landshypotek's profit in the new model with an active contribution of capital .....	8
Figure 10. Illustration of the outline of the study. ....	11
Figure 11. How "Lantmännen's" surplus is distributed to its members. ....	12
Figure 12. Schematic figure illustrating how the members in "Södra" acquire contributed capital.....	13
Figure 13. How "Södra's" surplus is distributed to its members. ....	14
Figure 14. The members cash flow per year for a long-term loan of ten years. ....	22
Figure 15: The members cash flow per year for a long-term loan of ten years without active contribution of contributed capital. ....	23
Figure 16. The member's cash flow per year for a long-term loan of ten years with a full active contribution of contributed capital of four percent of the borrowed capital. ....	24
Figure 17. The member's cash flow per year for a long-term loan of ten years with an full active contribution of contributed capital of four percent of the borrowed capital through the use of the "member loan" .....	25
Figure 18. Schematic model describing the theoretical relationship between Landshypotek and its members ....	26
Figure 19. Quality criteria for research interviews.....	30
Figure 20. Members' confidence in Landshypotek as a future profit making enterprise. ....	61
Figure 21. Members' attitudes towards the risk of investing capital in Landshypotek compared to the stock market. ....	61
Figure 22. The dividend rate at which the members will consider to terminate their membership. ....	61
Figure 23 Members' attitudes towards the importance of a low interest rate on borrowed capital compared to high dividend on contributed capital .....	61
Figure 24. The members' attitudes towards the fact that it is not possible to receive neither patronage refund or dividend until the proceeds on the equity account has reached the input limit. ....	62
Figure 25. Members' overall perception of Landshypotek's intended change of contributed capital.....	62
Figure 26. Member's cost of capital at different amounts of contributed capital in the new model .....	67
Table 1. Distribution of members' contributed capital in Landshypotek.....	6
Table 2. "Lantmännen's" dividend (million SEK) to its members .....	13
Table 3. Dividend to "Södra's" members. ....	14
Table 4.. Distribution of selected members according to the criteria.....	34
Table 5. Summary of the first six members' answers and attitudes divided under the hypotheses.....	63
Table 6. Summary of the last six members' answers and attitudes divided under the hypotheses .....	64
Table 7. Overview of the interviewed members .....	65
Table 8. Member's cost of capital in four different scenarios.....	66
Table 9: The members' attitudes towards the new model and their ambition to invest .....	74

# 1 Introduction

The purpose of the introduction chapter is to provide the reader with an overview of the study's aim, problem, delimitations and a background of Landshypotek.

## 1.1 Background

Landshypotek's first regional association was established in 1836 in Scania, Sweden (www, Landshypotek, 2011, 1). Its purpose was to provide farmers with credits and to use their agricultural land as security. During the 1840s and 50s, an additional six regional associations were established. All the regional associations had been established as privately organized cooperatives without government support. The cooperative idea meant that the regional associations were not aspiring for profit and as a result they could provide credits at low interest rates, basically at the same rate as the associations borrowing rates. This was made possible through specific subsidies that were not reflected in the interest rate and that covered the cost of management.

During 1856-1857 the conditions on the international debt market worsened. This led to higher interest rates and borrowing problems (www, Landshypotek, 2011, 1). As a result the lending of regional associations declined dramatically while the need for capital after a poor harvest was large. During the 1850s there had also been an increased lack of trust in the regional associations amongst farmers. This led to the conclusion that it was necessary to reorganize the organization. Hence, in 1860 the idea of centralization of funding for a joint mortgage bank was presented (www, Landshypotek, 2011, 2).

The regional associations' position to the proposal was not necessarily positive (www, Landshypotek, 2011, 2). A few of the regional associations claimed that they had succeeded as independent entities and therefore did not need any central control from Stockholm, while other regional associations welcomed the proposal because they felt that the lending conditions became too onerous and that they would receive more favorable terms if the borrowing was managed centrally. Although the attitudes differed amongst the regional associations, the proposal of centralization of funding for a joint mortgage bank was accepted in 1861 and got the name "Sveriges Allmänna Hypotetsbank".

Because of the deregulation of the Swedish credit market in 1983 and the adaption of international capital adequacy rules, it was necessary for Landshypotek to strengthen its capital (www, Landshypotek, 2011, 3). Once again it was necessary to reorganize the organization. In 1995 the decision was made for Landshypotek to be reorganized as a joint-stock-company, which got the name "Landshypotek AB". The joint-stock-company was to be owned by a new economic association formed by the ten existing regional associations. By forming this organization Landshypotek had created a cooperative organization that basically made it impossible for takeovers by outside stakeholders and at the same time guaranteed the borrowers continued influence.

Landshypotek is today Sweden's largest credit institution for land and forest owners with loan assets around 50 billion SEK (www, Landshypotek, 2011, 4). As shown in figure 1 Landshypotek's market share of first mortgage loans to land and forest owners is 38 percent (pers. com Ordell, 2011). "Landshypotek AB" is owned by the economic association consisting of 52 000 members and has 19 offices all over Sweden. The organizational

structure is shown in figure 2. Membership in Landshypotek requires ownership of land or forest, and the members have to place their mortgage in Landshypotek (www, Landshypotek, 2011, 5).

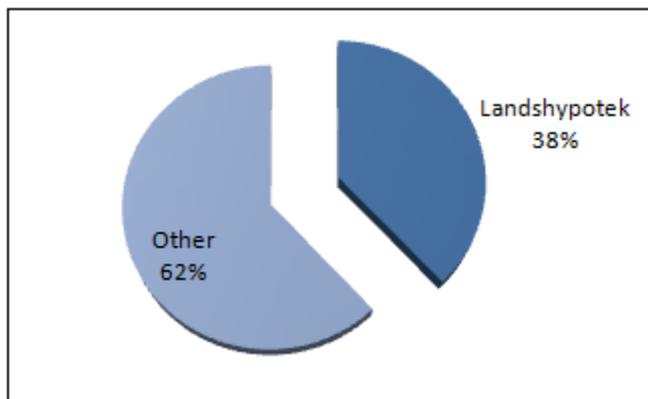


Figure 1. Landshypotek's market share of first mortgage loans to land and forest owners 2010. Source own arrangement

All clients in “Landshypotek AB” automatically become members of the Landshypotek economic association. The economic association is a cooperative where “one member one vote” is applied at the annual meeting (Landshypotek, 2010). Members use their vote at the annual meeting to select “elected representatives” that will serve as appraisers, ambassadors and board of directors (www, Landshypotek, 2011, 10). Of the 52 000 members there are a couple of hundred “elected representatives”. Today Landshypotek can provide almost all the same services as a common bank but the main business idea is the same as it was 175 years ago, namely to provide land and forest owners with credits and to use their agricultural land as security (www, Landshypotek, 2011, 6) (Landshypotek, 2011, 1).

“Landshypotek AB” is the parent company where 90 percent of the group business is conducted (Landshypotek, 2010). The parent company provides land and forest owners with first mortgage loans up to 75 percent of the assessed market value, secured by real property. Within the group there are also two subsidiary companies, “Landshypotek Jordbrukskredit AB” and “Lantbrukskredit AB”. “Landshypotek Jordbrukskredit AB” provides other credits for land and forest owners not covered by “Landshypotek AB”. “Lantbrukskredit AB” finance farm related activities. However, since July 2003 there are no new credits provided by “Lantbrukskredit AB”.

Landshypotek group is financed through borrowing on the capital market and the members' contributed capital (Landshypotek, 2010). Borrowing on the capital market is distributed in a number of funding programs tailored to different types of investors, and thereby achieving the desired flexibility. All borrowing on the capital market was managed by “Sveriges Allmänna Hypotetsbank” up until 1997. But “Sveriges Allmänna Hypotetsbank” is currently being discontinued and today all borrowing is managed by “Landshypotek AB”.

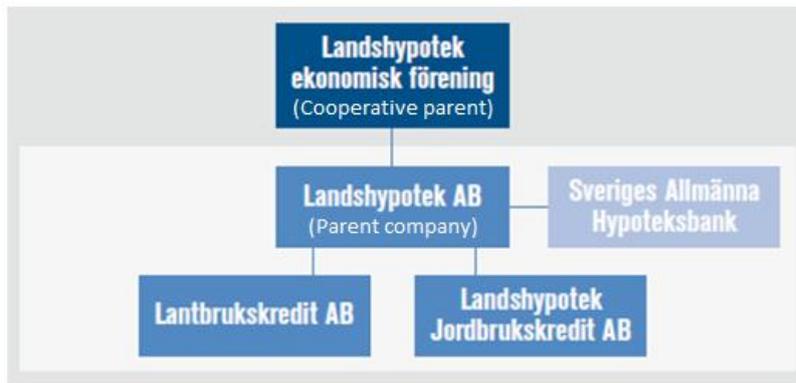


Figure 2. Organizational chart for Landshypotek group. Source own arrangement according to Landshypotek 2011, 11

Figure 2 shows Landshypotek groups organizational structure with “Landshypotek ekonomisk förening” (Landshypotek economic association) as the controlling entity over “Landshypotek AB” and its subsidiary companies “Landshypotek Jordbrukskredit AB” and “Lantbrukskredit AB”. The figure also shows “Sveriges Allmänna Hypotetsbank” that is currently being discontinued.

Landshypotek’s governance is structured as in figure 3. Landshypotek’s members are divided into ten different regions (www, Landshypotek, 2011, 11). All members are welcome to their regional meeting to vote for representatives to the regional board. The members are entitled one vote each. If members have an idea or an issue, they contact their local representative, who discuss the subject on the regional board. The matter is also passed on to the board of the economic association and the board of “Landshypotek AB” (pers. com Ordell, 2011). The board of the economic association consists of one member from each regional board, the chief executive officer and two union representatives (www, Landshypotek, 2011, 11). The board of “Landshypotek AB” is chosen at the Annual General Meeting by a proposal from the nominating committee (pers. com Ordell, 2011). The nominating committee consists of members from the economic association board.

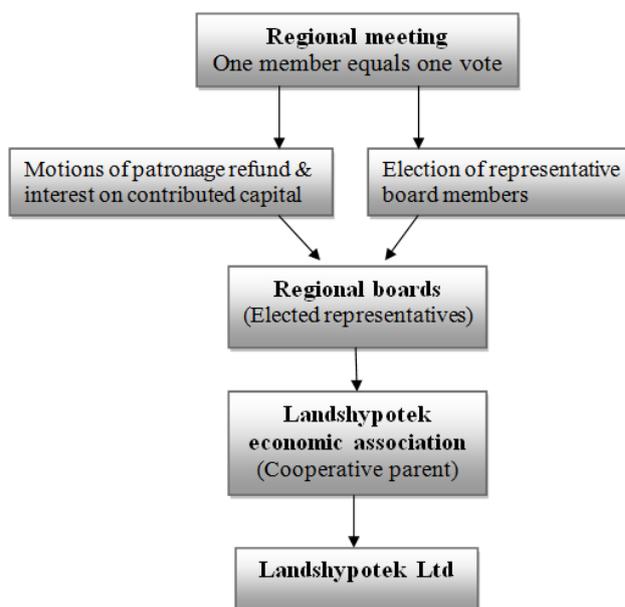


Figure 3. Organizational chart for governance in Landshypotek. Source own arrangement

Figure 3 describes how the members in Landshypotek are able to influence the management of the company. Every member has one vote that they can use at the regional meeting to elect representatives for the regional board. It is then up to the “elected representatives” to represent the members and influence how “Landshypotek AB” is managed.

Landshypotek’s lending to its members was barely 52 billion SEK in 2010, which is a lending growth of 11,4 percent compared to 2009 (Landshypotek, 2011, 2). During 2009 Landshypotek’s net lending increased by 5,2 billion which corresponds to a lending growth of 12,5 percent (Landshypotek, 2010). This is an 8,5 percentage units larger increase compared to 2008 when the net lending only increased by four percent. The large lending growth in 2009 compared to 2008 is explained by increased activity on the market with strong interests in both land purchases and investment in buildings and machinery. During 2009 the lending to the public (members) amounted to 46 billion SEK and as shown in figure 4 the lending has increased continuously since 2006.

Landshypotek’s equity for 2010 was barely 3,4 billion SEK which has been built up through patronage refund on the borrowers (members) interest payments (Landshypotek, 2011, 2) (Landshypotek, 2011, 1). The members’ contributed capital constitutes just over 1 billion of the equity and the rest (2,4 billion) is Landshypotek’s unallocated equity. The equity is enough to balance today’s lending but because of the increasing demand for capital and Landshypotek’s future growth strategy more equity is needed. Landshypotek is therefore considering introducing a change in the financial model at the start of year 2012.

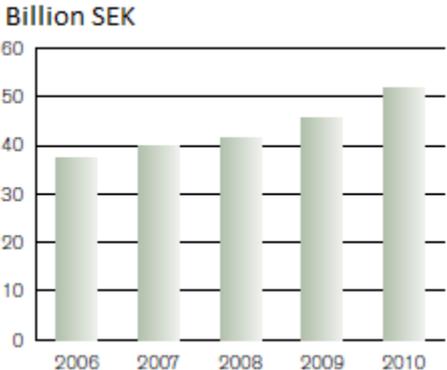


Figure 4. Landshypotek’s lending to the public(members) 2006-2010. Source Landshypotek 2011, 2

A figure 4 show that Landshypotek’s lending to the public (members) has increased continuously from 2006 to 2010. Landshypotek’s lending to the public amounted to barely 52 billion during 2010 which is an 11,4 % increase compared to 2009.

1.1.1 Old model

One of Landshypotek’s objectives is that only its members should profit from the low interest rates (Landshypotek, 2011, 1). This means that Landshypotek can offer competitive lending conditions and at the same time let members receive a share of the economic surplus through patronage refund and interest on contributed capital. Landshypotek’s profits are today distributed to borrowers (members) through patronage refund on interest that the borrowers paid during the year and interest on contributed capital (www, Landshypotek, 2011, 7).

How large the patronage refund will be is determined each year on Landshypotek’s annual meeting. In 2009 the patronage refund was 4,5 percent, which meant the members received a refund that amounted to 4,5 percent of their individual paid interests. Of the received patronage refund, 70 percent is deposited into an equity account until it reaches eight percent (input limit) of the borrowed capital (www, Landshypotek, 2011, 8). The remaining 30 percent and any excess of the input limit are deposited into a member account.

The proceeds on the equity account serve as the members’ contributed capital and are paid out first three years after the members exit from Landshypotek. The contributed capital is fixed for the whole lending period but the proceeds on the member account offers three choices (www, Landshypotek, 2011, 9). Keep the money in the member account and receive interest, receive deduction of interest payments or request cash payout (minimum withdrawal is 5000 SEK). Both the equity account and member account are interest bearing and for the last ten years the interest rate has averaged around five percent (www, Landshypotek, 2011, 7).

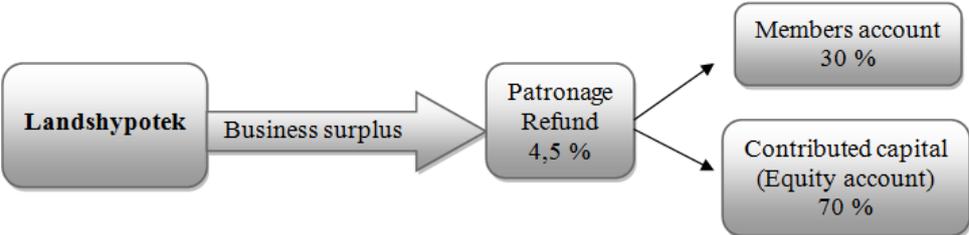


Figure 5. Distribution of Landshypotek’s profit in the old model. Source own arrangement

Figure 5 describes how Landshypotek’s profit is distributed in the old model. The members receive patronage refund based on Landshypotek’s business surplus and the members’ paid interests.

1.1.2 Distribution of contributed capital

The old model implies an illogical distribution of the contributed capital between different member categories (Landshypotek, 2011, 1). The member categories consist of members with different amounts of contributed capital in relation to their borrowed capital. As shown in figure 6 nearly half of the members each have a contributed capital that is larger than eight percent of their borrowed capital but the rest of the members’ contributed capital ranges from zero to eight percent. The total contributed capital in Landshypotek was just over 1 billion in 2010 (Landshypotek, 2011, 1). Table 1 shows that members with a contributed capital in excess of eight percent of their borrowed capital accounted for 29 percent of the total contributed capital in Landshypotek in 2010. The second largest group of contributors are members with 1,0 % – 1,5 % and 1,5 % - 2,0 % in contributed capital, that each accounts for seven percent of total contributed capital in Landshypotek. This makes the members with a contributed capital exceeding eight percent of their borrowed capital the single largest group of capital contributors in Landshypotek.

The data in appendix 7 shows that 27 percent of the members each have less than two percent contributed capital. Their contributed capital equals 22 percent of the total contributed capital but their debt equals 68 percent of Landshypotek’s total lending. The reason for this is probably that members with little contributed capital have been members for fewer years and have not been able to amortize much of their debt. In contrast, members with large contributed capital have been members for many years and therefore amortized most of the

original debt. The conclusion is that many members with large loans have contributed little capital. This could constitute a problem because members with little contributed capital can take part of profits from the cooperative without contributing too much. The intended change of contributed capital is a proposal that might solve this problem.

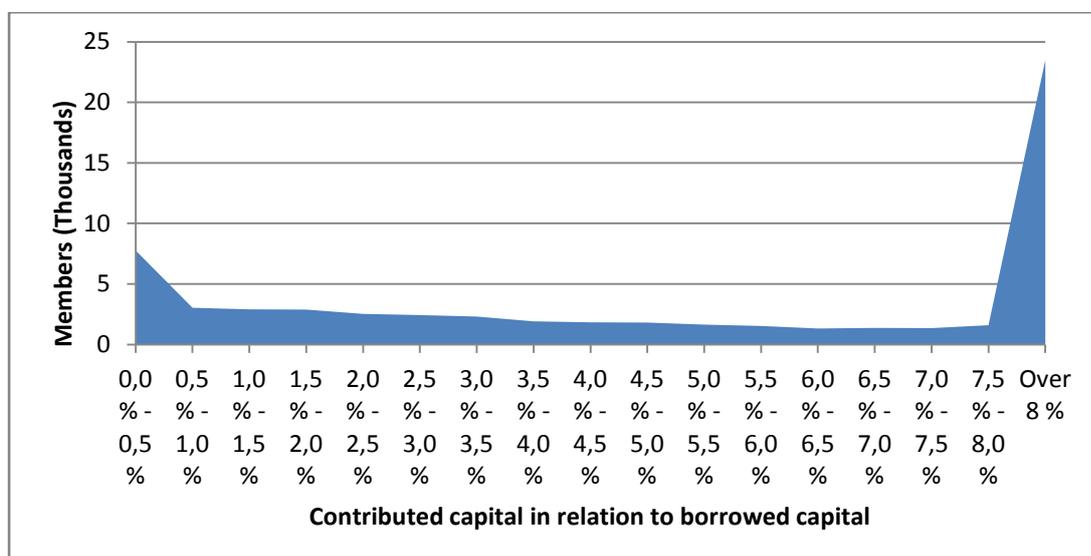


Figure 6. Members with different amount contributed capital in relation to their borrowed capital. Source own arrangement according to Landshypotek

Figure 6 illustrates in intervals how much capital Landshypotek's members have contributed with. Approximately 7 000 members each have a contributed capital that ranges from 0,0 % - 0,5 % of their borrowed capital. The interval groups between 0,5 % - 1,0 % and 7,5 % - 8 % all consists of around 2000 members each. The largest interval group consists of roughly 23 000 members who all have a contributed capital in excess of eight percent of their borrowed capital.

Table 1. Distribution of members' contributed capital in Landshypotek. Source own arrangement

Contributed capital in relation to borrowed capital	Contributed capital (SEK)	Contributed capital in relation to total contributed capital
0,0 % - 0,5 %	25 980 478 SEK	3 %
0,5 % - 1,0 %	54 841 129 SEK	5 %
1,0 % - 1,5 %	70 150 268 SEK	7 %
1,5 % - 2,0 %	72 951 829 SEK	7 %
2,0 % - 2,5 %	66 159 689 SEK	6 %
2,5 % - 3,0 %	64 294 622 SEK	6 %
3,0 % - 3,5 %	56 027 748 SEK	5 %
3,5 % - 4,0 %	47 625 231 SEK	5 %
4,0 % - 4,5 %	42 212 573 SEK	4 %
4,5 % - 5,0 %	41 351 571 SEK	4 %
5,0 % - 5,5 %	37 234 989 SEK	4 %
5,5 % - 6,0 %	35 279 090 SEK	3 %
6,0 % - 6,5 %	29 792 504 SEK	3 %
6,5 % - 7,0 %	29 515 039 SEK	3 %
7,0 % - 7,5 %	29 024 773 SEK	3 %
7,5 % - 8,0 %	26 298 014 SEK	3 %
Over 8 %	297 563 429 SEK	29 %
Total	1 026 302 976 SEK	100 %

Table 1 illustrates how the contributed capital is distributed among the different member categories in relation to Landshypotek’s total contributed capital. The table shows that members with contributed capital over eight percent of their borrowed capital contribute with 29 percent of Landshypotek’s total contributed capital, making them the single largest group of capital contributors.

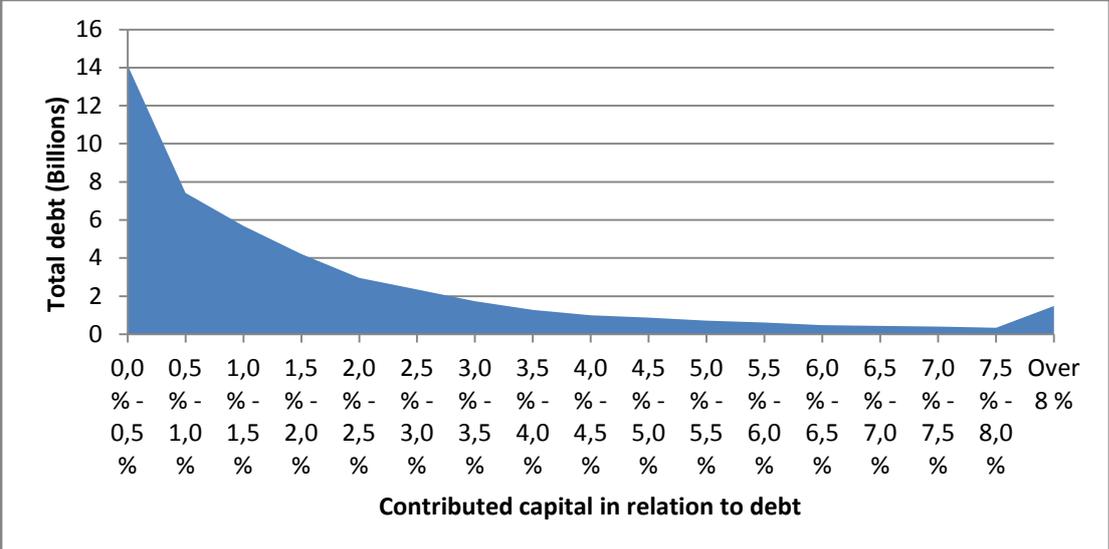


Figure 7: Total debt versus contributed capital in relation to debt Source own arrangement according to Landshypotek

Figure 7 shows that members with a contributed capital between 0 and 2,5 percent holds the largest share of borrowed capital in Landshypotek. This means that members with a small percentage contributed capital in relation to their borrowed capital are those members who have the majority of the members’ total debt.

1.1.3 New Model

The change in the financial model that Landshypotek is considering implies that the member account is removed and that the input limit on the equity account is reduced from eight percent of the borrowed capital to four percent (Landshypotek, 2011, 1). Instead of interest on contributed capital the members will be entitled to a dividend that is proportional to the volume of their contributed capital. Patronage refunds and dividends on contributed capital are capitalized on the equity account until it reaches four percent of the borrowed capital. The change in the financial model also allows the members to deposit the full amount of contributed capital right away, either through a “member loan” or the use of own assets (pers. com Ordell, 2011). By doing so, the member will receive direct payout of both patronage refund and dividend. The intended change will also give the board of directors the opportunity to each year change the input limit if needed.

Following the intended change in the financial model, Landshypotek’s profits will be distributed among the members through dividends on contributed capital and patronage refunds on paid interests as shown in figures 8 and 9 (Landshypotek, 2011, 1). Because dividends and patronage refunds are based on the business surplus, it is impossible to predict how large they will be, but the goal is to give ten percent dividend on contributed capital, and one percent patronage refund on paid interests. Given this intended change Landshypotek hopes to attain the funds needed to expand the business and to reward the members who contribute capital.

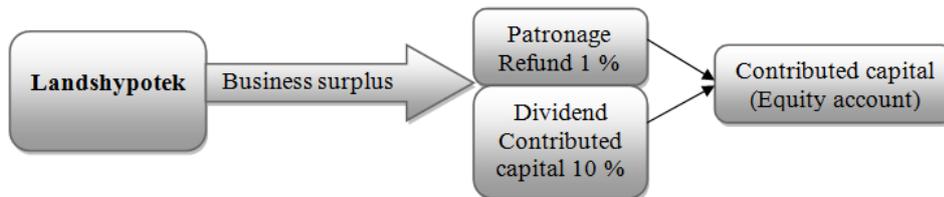


Figure 8. Distribution of Landshypotek's profit in the new model without an active contribution of capital. Source own arrangement

Figure 8 shows the cash flow in the new model for a member that does not choose to invest capital in Landshypotek. The member's contributed capital has not reached four percent of the borrowed capital in this scenario. Landshypotek's profit will provide the member with patronage refunds (one percent of paid interest) and dividend (ten percent) of the contributed capital, but this will be capitalized as contributed capital until the capital amounts to four percent of the borrowed capital. When four percent of the borrowed capital is reached all dividends and patronage refunds are directly paid out to the member (Landshypotek, 2011, 1).

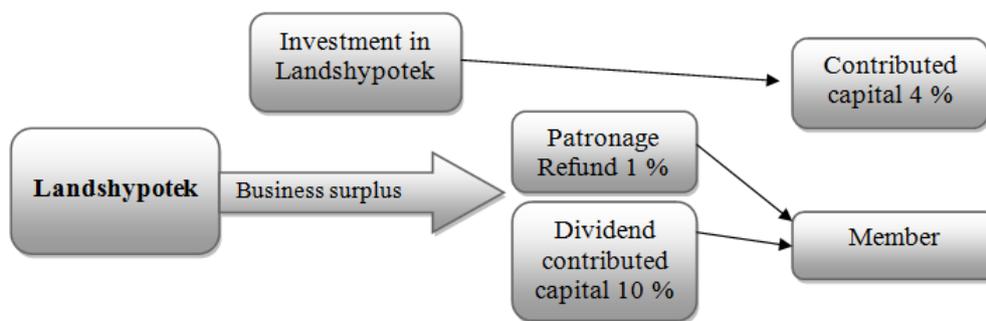


Figure 9. Distribution of Landshypotek's profit in the new model with an active contribution of capital. Source own arrangement

Figure 9 presents how the cash flow changes if the member invests in Landshypotek to immediately reach four percent of the borrowed capital. Another method to reach the maximum of four percent could be that the member has collected sufficient contributed capital through capitalization of patronage refunds and dividends of contributed capital. When the limit of four percent is reached the patronage refunds and dividends on contributed capital are disbursed as capital income in the member's business operations (Landshypotek, 2011, 1).

## 1.2 Problem

In comparison with investor-owned firms, cooperatives are at a disadvantage in raising equity capital (Royer, 1995). This is many analysts conclusion due to cooperatives unique financing features. The ownership structure in cooperatives is different from investor-owned firms because the owners/members of the cooperative also are its clients (Lerman & Parliament, 1993). In investor-owned firms the clients are separated from the investors who own the firm. The investor-owned firms therefore seek to maximize earnings adjusted for risk so that investors can receive a return proportional to their investment. Rather than earning a return on invested capital, members in cooperatives seek to benefit directly through their dealings with the cooperative. Because of this, there is an incentive for members to underfinance the cooperative so that their patronage relative to their investments increases (Royer, 1995).

The difference in ownership structure requires different financial and business strategies (Lerman & Parliament, 1993). According to Lerman & Parliament (1993) one of the main differences is that in comparison with investor-owned firms stock, cooperative equity is not marketable. This is because the distribution of earnings in cooperatives is based on patronage and not investment. As a result there are no incentives for non patrons to invest in a cooperative and cooperatives are therefore restricted to its members to raise equity. But members may be reluctant to increase their illiquid stake in a cooperative because of the non marketability of the equity. Landshypotek's members experience the same problem of the non marketability of their equity. It is only Landshypotek's members who are able to contribute with capital. The possibility to raise equity through retained earnings may also be met with resistance from the cooperatives members because it translates into higher costs and lower revenues for the patrons. This may result in an unbalanced capital structure for expanding cooperatives because it is easier to finance the growth with loans than raise equity through retained earnings (Royer, 1995).

Potential obstacles for cooperative growth are ill-defined property rights and agency problems (Fahlbeck, 2007). Free-rider problem, horizon problem, portfolio problem and are all problems within the property rights theory (Cook, 1995). These problems exist because of the nonexistent secondary market for cooperative equity.

As mentioned, capital acquisition can be a problem for cooperatives. This is explained in property rights theory through "free-rider problem" and "horizon problem" (Harris et al, 1996). According to Vitaliano (1983) and the horizon problem members can only benefit from investments over the time horizons of their expected membership in the cooperative. This creates differences in investment preferences among the members based on diverse time horizons. The general tendency is leaning towards investment with short payoff periods. To encourage Landshypotek's members to invest in long term might be a problem if some members are considering ending their membership in a few years. Members prefer investments which generate payoffs during expected patronage time rather than after (Harris et al, 1996). This implies that the intended change of contributed capital will be more interesting for members with long time left in Landshypotek than members with short time left (Nilsson, 2001).

According to Harris et al, (1996) the free-rider problem usually emerges in cooperatives because ownership does not provide any additional benefit. The members will only obtain benefits through their economic activities with the cooperative. This could result in lack of incentives for members to invest in the cooperative, even though the members' investments are critical for the cooperative's success. Due to lack of incentives for investments, non investing members could become free-riders. This is because they can harvest benefits that they have not fully contributed to. The free-rider problem also occurs in Landshypotek because new members get access to equity contributed by the older members. In the old model the interest on contributed capital is small compared to the patronage refund, which implies that the members in Landshypotek mostly profit through their dealings with the cooperative. This implies that there is a risk that members with little contributed capital will become "free-riders" (Harris et al, 1996).

The portfolio problem occurs when members hold suboptimal portfolios and are unable to match their cooperative assets to their personal risk preferences (Cook, 1995). The portfolio problem is an effect of the non marketability of cooperative equity that implies lack of transferability and liquidity. Due to the portfolio problem members are more reluctant to

invest in new cooperative equity (Royer, 1995). This implies reduced opportunities for Landshypotek's members to diversify their investments and spread the risk over different assets.

### 1.3 Aim

Landshypotek has today enough capital to manage the core operation but with the future growth strategy more capital is needed. To meet the need for more capital Landshypotek is considering a change of the contributed capital in order to acquire capital from its members. Landshypotek believes that this will strengthen the equity and increase the members' benefits. Because Landshypotek is owned by its members it is interesting to examine their attitudes towards the new financial model. The aim of the study is to answer the following questions:

- Will Landshypotek's members be negative towards increasing their illiquid stake?
- Will the intended change of contributed capital reduce the risk of free-rider problem?
- Will members with a long time left in Landshypotek be more positive towards the intended change of contributed capital than those with a short time left?
- Will members terminate their business relationship with Landshypotek due to the intended change of contributed capital?
- How will the intended change of contributed capital affect a member's cost of capital?

### 1.4 Delimitations

The study is delimited to twelve members in Landshypotek who all but one are situated in the region around "Mälardalen". The reason for this is that the study contains qualitative research interviews that demand quite some time. It is therefore not reasonable to conduct more interviews given the study's time constraint. The region around "Mälardalen" is chosen because it makes it possible for us to visit the interviewees, which mean that more members are interested in participating in the study. But because of the criteria used to select members for the interviews, it was not possible to obtain all interviewed members within the same geographical area and one member is therefore not situated in the region around "Mälardalen". The study is also delimited to the Landshypotek's intended change of contributed capital and does therefore not consider tax effects or the impact of the opportunity cost of capital.

### 1.5 Outline

The outline of the thesis, illustrated in figure 10, is intended to provide the reader a picture of the structure of the study. Chapter one will give the reader an introduction to Landshypotek, illustrate how the financial model is structured today and present the change of contributed capital that Landshypotek is currently considering. The chapter will also provide the reader with the study's aim and delimitations and present problems that can occur when a cooperative needs to acquire capital. Chapter 2 contains a review of some earlier studies and a presentation of how the contributed capital works in the cooperatives "Lantmännen" and "Södra". Chapter 2 also contains the theories chosen to analyze the empirical material and a presentation of the created hypotheses. Chapter 3 provides the reader with a presentation of the method chosen to achieve the study's aim and a description of the course of action, followed by chapter 4 that contains the results from the qualitative interviews and the calculations of a member's cost of capital. In chapter 5 the empirical material presented in

chapter 4 is analyzed according to the theories in chapter 2 in order to confirm or reject the hypotheses. The conclusions are presented in chapter 6 and provide answers to the questions stated in the study's aim. Finally, parts of the result that are not covered in the analysis are discussed in chapter 7. The chapter also provides suggestions for further studies and recommendations for Landshypotek.



*Figure 10. Illustration of the outline of the study. Source own arrangement*

# 2 Theoretical perspective and literature review

Chapter 2 provides a literature review of other cooperatives such as “Lantmännen” and ”Södra”. A theoretical perspective of the used theories and the hypothesis are also presented.

## 2.1 Literature review

Since 1998 it is possible for cooperatives to transfer non-restricted equity to restricted equity (Nilsson, 2002). The non-restricted equity is the cooperative’s unallocated capital, which is owned by all members, but no member has clear property rights to the unallocated capital. This implies that a member has no right to receive any share of the unallocated capital when he/she terminates the membership. The restricted equity is the members’ individual owned capital in the cooperative. This capital has clear property rights and if a member leaves the cooperative he/she receives his/her share of the restricted equity. Cooperatives as “Lantmännen” and “Södra” use this opportunity to transfer non-restricted equity to restricted equity by issuing bonus shares to their members. Hence, the members will receive additional capital to which they have clear property right.

### 2.1.1 “Lantmännen”

“Lantmännen” is a cooperative owned by 36 000 members (www, Lantmännen, 2011, 1). The cooperative’s main business is food, energy and farming. To join the cooperative the members have to contribute with a minimum of 10 000 SEK within five years (www, Lantmännen, 2011, 2). The members contribute with capital which is deducted from their patronage refunds and dividends on contributed capital. Fifty percent of the refund and dividend is capitalized within the cooperative as individual equity, but it is possible to capitalize more if wanted. In case of a new member all refund and dividend is capitalized until the minimum requirement of 10 000 SEK is fulfilled. The member is able to contribute a maximum of 450 000 SEK, but the limit can be adjusted to 15 percent of the turnover.

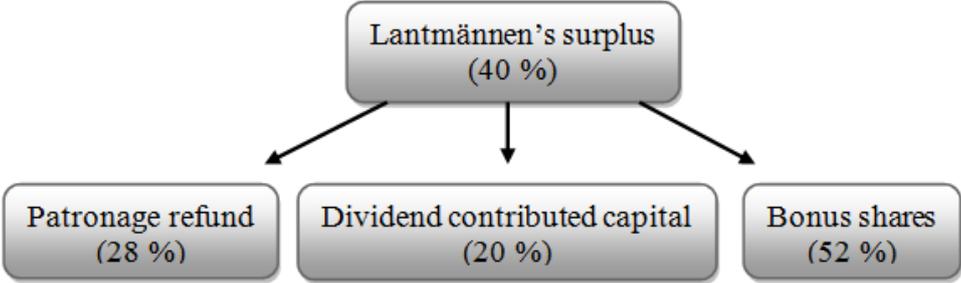


Figure 11. How “Lantmännen’s” surplus is distributed to its members. Source own arrangement

Figure 11 reveals that “Lantmännen’s” aim is to distribute 40 percent of the business surplus to its members through patronage refund, dividend on the contributed capital and new bonus shares (Lantmännen, 2011, 3). Out of the surplus 28 percent is paid out as patronage refund, 20 percent as dividend and 52 percent as bonus shares. The bonus shares imply that a part of the cooperative’s business surplus is transferred to the member’s individual equity. This constitutes a contribution of capital to the member’s capital account.

Table 2. "Lantmännen's" dividend (million SEK) to its members. Source www, Lantmännen, 2011, 3

Dividend (MSEK)	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001
Patronage Refund	95	1	122	83	64	139	199	154	161	144
Contributed Capital	68	63	57	50	56	50	49	38	38	23
Bonus shares	177	100	110	151	99	100	39	-	-	171
Total	340	164	289	284	219	289	287	192	199	338
*	18 %	13 %	14 %	20 %	13 %	14 %	9 %	4 %	4 %	19 %

\* Dividend and issued bonus shares in percent of the member's contributed capital.

Table 2 presents how "Lantmännen's" dividend is distributed to the members from 2001 to 2010.

### 2.1.2 "Södra"

"Södra" is a cooperative owned by 51 000 forest owners (www, Södra, 2011, 1). The members own 36 000 forest properties which is more than half of the privately owned forest in the southern parts of Sweden.

The members in "Södra" do not pay any entrance fee to join the cooperative (Södra, 2011). Instead they contribute with capital incremental by deducting funds from the amount paid for timber deliveries. The contributed capital is paid back to the members after the membership is terminated. The members have to contribute with 600 SEK per productive hectare, with a maximum of 200 hectares. The members also have the opportunity to contribute with more capital by investing in "Södra". Many members use this option because their contributed capital is the base for calculation of the dividend. The contributed capital can also be increased by bonus shares, which occurs when "Södra" transfer non-restricted equity to members' capital account. The members have the opportunity to sell the bonus shares to other members (Södra, 2011). The contributed capital belongs to the members, but the cooperative uses the money during the membership and pays dividend in return.

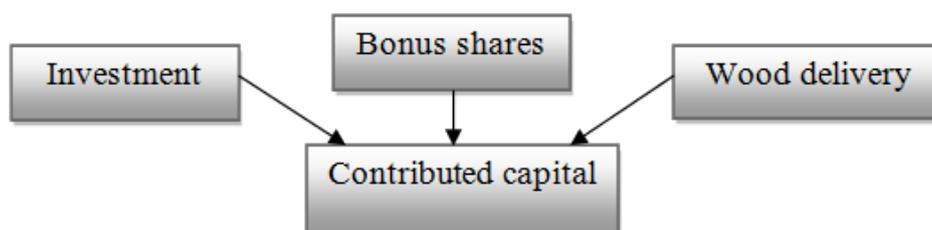


Figure 12. Schematic figure illustrating how the members in "Södra" acquire contributed capital. Source: own arrangement

In 2010 the total contributed capital was 2 354 million SEK of which 894 million SEK was contributed by investments in "Södra" (Södra, 2011). The equity in "Södra" amounts to 4 289 million SEK of which 3 737 million SEK is restricted equity. By issuing bonus shares, 1 460 million SEK has been transferred to the members' contributed capital.

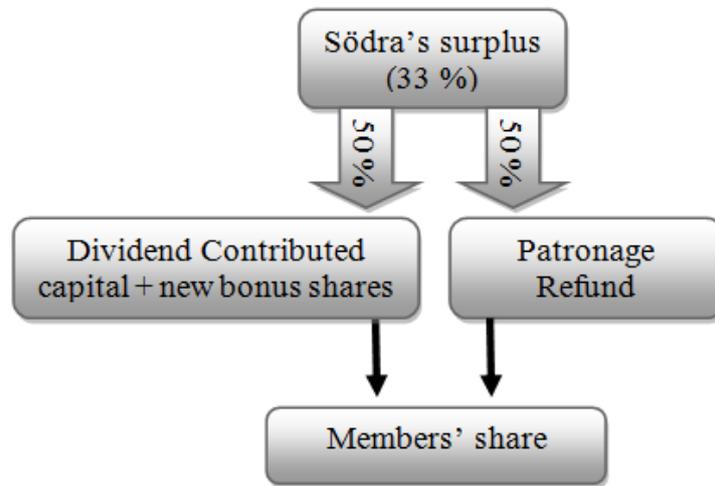


Figure 13. How “Södra’s” surplus is distributed to its members. Source own arrangement

The members profit from the business surplus (Södra, 2011). The members’ dividend of the profit should at least be one-third of the business surplus, measured over an economic cycle. This share is distributed to all members based on their contributed capital and their wood deliveries. The relationship is fifty-fifty, half of the share is based on the contributed capital and the other half is based on patronage refund.

Table 3. Dividend to “Södra’s” members. Source *www, Södra, 2011, 2*

Dividend to members	2003	2004	2005-2006	2006-2007	2008	2009
Contributed capital	15 %	9 %	13,5 %	19,5 %	4 %	3 %
Patronage refund	9 %	6 %	*	12,5 %	5 %	8 %
Bonus share	10 %	-	-	40 %**	10 %**	10 %**
Total (Million SEK)	601	316	1402	1284	331	386

\* Pulpwood 35,22 SEK/m<sup>3</sup> & timber 70 SEK/m<sup>3</sup>

\*\* Bonus shares issued only on invested contributed capital

The table 3 presents the dividends from 2003 to 2009. The members receive a dividend based on the contributed capital (*www, Södra, 2011, 2*). The contributed capital consists of capital which is actively invested by the members and capital which is deducted from their wood deliveries. The members also acquire contributed capital by bonus shares, but the bonus shares are only based on their invested part of the contributed capital. If a member does not invest any capital he/she is not entitled any bonus shares. With this model the members who actively invest in the cooperative are rewarded.

This can be clarified with an example of a member who has 20 000 SEK in contributed capital, of which 10 000 SEK is invested in “Södra”. For year 2009 the member would receive 600 SEK (three percent of 20 000 SEK) as dividend on contributed capital and 1 000 SEK (ten percent of 10 000 SEK) as bonus shares. These bonus shares of 1 000 SEK will be added to the member’s equity account and the contributed capital will be 21 000 SEK. The member will also receive a patronage refund of eight percent.

### 2.1.3 Similar studies

A new member in "Lantmännen" and "Södra" is not forced to invest capital immediately, but in "Lantmännen" the member's patronage refunds and dividends are capitalized until the minimum requirement of contributed capital is reached. A member in "Södra" has to contribute with capital by deducting funds from the amount paid for wood deliveries. Landshypotek will not demand an entrance fee for new members. If a member does not invest capital he/she will contribute with capital in the same procedure as in "Lantmännen" until four percent of the borrowed capital is reached. This implies that Landshypotek's system of acquiring capital from the members is very similar. It is therefore possible that Landshypotek's intended change of contributed capital might result in comparable effects as experienced in "Lantmännen" and "Södra".

In the study "Medlemmen som ägare: Effekterna av insatsemissioner I Svenska Lantmännen" Nilsson examines how "Lantmännen's" members experience that their role as members were changing when bonus shares were introduced. The question was what consequences this introduction of bonus shares would have on the members' actions towards the cooperative.

According to Nilsson's study (2002) most of the members in "Lantmännen" consider themselves as members and not as owners. The majority of the members have no desire to be more active as owners. Members of all ages have this attitude. The members' primary relation to "Lantmännen" is the business transactions with the cooperative. Any changes in this matter would quickly affect the members' behavior because of their strong attitudes towards the subject. How the members would change their behavior concerning issues as contributed capital and bonus shares is more unclear because the members have rather weak interests in these kinds of owner-issues. In Landshypotek the patronage refund depends on the amount of interest paid and is therefore an indication of the members' business transactions with the cooperative. In accordance with Nilsson's study the patronage refund might affect the members' attitudes towards the intended change of contributed capital. The fact that the dividends are prioritized at the expense of the patronage refunds in Landshypotek's new financial model therefore might have a large impact on the members' attitudes.

Nilsson (2002) reveals that if the bonus shares are based on the members' patronage with the cooperative the members are willing to adjust their behavior to meet new conditions. But if the bonus shares are based on the contributed capital (i.e. the degree of ownership), the members are unsure if they will accommodate their behavior to meet the cooperative's new conditions. Half of the respondents proclaim that they will be more engaged as members if more capital is at stake. The members have very clear attitudes that members who contribute with capital to the cooperative's equity are those that should profit from the bonus shares. The study also demonstrates that there are members who reflect over their ownership, but the majority of the members consider their membership as something mandatory to benefit from the overall advantages that comes with the membership. Nilsson (2002) study indicates that Landshypotek's members will be negative towards the intended change because the dividend is tied to the contributed capital and not to the patronage refund.

The study "Attityder till kooperativ finansiering" investigates attitudes towards different financial models in the Swedish dairy cooperative Milko. One of the investigated financial models is bonus shares. The study is conducted as a qualitative study and the empirical material consists of 21 interviews with "elected representatives" in Milko. The study shows that the majority of the "elected representatives" are positive towards bonus shares because it strengthens the members' property rights and redistributes unallocated capital to allocated

capital. This can be compared to the intended change of contributed capital that makes it possible for the members to invest capital in Landshypotek and thereby receive a larger part of the cooperative's business surplus. In accordance with the "elected representatives" in Milko, this implies that Landshypotek's members will be positive towards the intended change of contributed capital.

Another interesting study is Karlsson's (2010) "Lantmännens emission av förlagsandelar och handeln med emissionsinsatser". The thesis analyzes "Lantmännens" members' incentives to make decisions concerning financial issues within the cooperative. This study would have been appropriate to make comparisons with, but this was not possible because Karlsson's thesis is confidential and will not be published until after the completion of this study.

Studies about members' attitudes towards similar topics in international cooperative banks would have been useful as a comparison to this study. Although several attempts has been made the authors have been unable to find relevant study's regarding contributed capital in cooperative banks. Even if the authors were unable to find similar studies it is important to stress that there might be studies written.

## 2.2 Theoretical perspective

### 2.2.1 Cooperative

According to the United States Department of Agriculture, “A *cooperative is a user-owned, user-controlled business that distributes benefits on the basis of use*” (Croop & Zeuli, 2004, p. 1).

Three cooperative principals are captured within this definition, the users own the cooperative, the users control the cooperative and the benefits are distributed proportionally (Croop & Zeuli, 2004). The “user-owner” principle implies that users (members) also are owners because they help finance the cooperative. Cooperative capital is traditionally provided by the members who are required to contribute with capital proportional to their use (patronage) of the cooperative. This is also the case for Landshypotek, as shown in figure 5 in chapter 1, where part of the patronage refunds is deposited into an equity account (www, Landshypotek, 2011, 3). These payments are deposited into the equity account until it reaches eight percent of the member’s borrowed capital, and serve as the member’s contributed capital. This type of shared financing creates joint ownership (Croop & Zeuli, 2004).

The “user-control” principle implies that a cooperative is governed by the owners (members), indirectly through their “elected representatives” on the board of directors and directly through voting (Croop & Zeuli, 2004). Cooperatives usually apply “one member one vote” which implies that voting is tied to the membership and not to the member’s patronage refund or investment in the cooperative. In Landshypotek, every member has one vote that he or she can use to select representatives on the regional board of directors (www, Landshypotek, 2011, 5). The regional board of directors then selects representatives for the main board of directors, whose purpose is to represent the members’ interests and to make decisions on policy and strategic issues from the cooperative’s vision and mission.

The proportionally distributed benefits are a key foundation for cooperatives (Croop & Zeuli, 2004). Costs and risks of doing business as well as benefits should be shared among the members proportionally to their patronage. Because of the proportionally distributed benefits there are no incentives for non patrons to invest in a cooperative (Lerman & Parliament, 1993). This lack of incentive leads to a nonexistent secondary market for cooperative shares and cooperatives are therefore restricted to its members to raise equity. With the new financial model, as shown in figures 8 and 9, Landshypotek is seeking to increase their equity and also to strengthen the connection between the members’ contributed capital and their share in the cooperative (Landshypotek, 2011). Instead of patronage refund, the member’s will receive part of the business surplus directly through dividend proportional to their contributed capital. Both Landshypotek’s old and new financial model is based on proportionally distributed benefits, which leads to a nonexistent secondary market for Landshypotek’s equity shares.

### 2.2.2 Property rights

Ill-defined property rights are often seen as a reason for cooperatives financial problems (Fahlbeck, 2007). The ill-defined property rights are a result of the individual members restricted ownership rights to the cooperatives residual. Property rights are defined as the right for an individual to consume, obtain income from or alienate an asset (Barzel, 1989). Tied to

the definition are a few assumptions. Property is a benefit or a claim to use an asset that is not necessarily limited to physical things, claims to property can only be made by individuals, individuals' claims to property must be enforceable and if the asset's value changes it will lead to a change in property rights (Macpherson, 1991).

As pointed out by Cook et al. (2011) the property rights theory also contributes to an understanding of the ownership in a cooperative. In economic analyses of ownership, two factors are very important, the residual claim rights and the residual right of control.

*The residual right of control* is the right to vote and make decisions concerning an asset's use e.g. the equity in Landshypotek (Cook et al, 2011). Landshypotek's equity consists of restricted equity and non-restricted equity. The restricted equity is capital which is contributed by the members' patronage refunds, labeled "contributed capital". The contributed capital is owned by the members and this capital has clear property rights. If a member leaves the cooperative the member's contributed capital is paid out. The non-restricted capital consists of unallocated capital and belongs to all members, but no specific member has the property rights of the unallocated capital. This implies that there is no clear connection between members and the unallocated capital. A member has no right to receive any share of the unallocated capital when he/she terminates the membership. This can make the definition of ownership i.e. the ownership of the rights become unclear in organizations such as Landshypotek. Large cooperative firms could have a large unallocated capital and the decision rights for this capital could be unclear. This leads to difficulties in defining who owns the cooperative.

*The residual claimants* are the owners of the firm, who are entitled to receive any net income that the cooperative firm generates (Cook et al, 2011). The owners/members in Landshypotek are today, see figure 5, entitled to patronage refund and interest on their contributed capital. The refund is based on the members' dealings with Landshypotek and the cooperative's profit (www, Landshypotek, 2011, 7). A member in Landshypotek pays interest on borrowed capital, and based on Landshypotek's profit that year, the Annual General Meeting decides the patronage refund rate. This means that the member receive a patronage refund of x percent of paid interest as shown below.

Patronage refund = patronage refund rate \* interest paid

The interest rate on contributed capital is also decided at the Annual General Meeting and is based on Landshypotek's profit (www, Landshypotek, 2011, 8). The total interest is also based on the member's contributed capital. If a member has contributed capital and the interest rate is set to x percent, the member receives interest on the contributed capital as shown below.

Interest on contributed capital = Contributed capital \* interest rate

*"When more than one person is involved in the ownership of an asset, the residual rights of control should be proportionately allocated to the residual claimants in order to achieve the most efficient possible use of the asset"* (Cook et al, 2011, p. 18). Cook argues that a member's residual return (patronage refunds and dividends) and residual control should be aligned. A member who has a large residual return should have a larger influence over an asset than a member with a smaller residual return. The magnitude of the residual return reflects the member's size of dealings with the cooperative. This implies that a member in

Landshypotek with large contributed capital and large loans should have more votes than a member with smaller amount of contributed capital and small loans, in order to obtain the most efficient possible use of the asset.

This will create the right incentives from an owner's view. In Landshypotek's case this would create incentives to invest in the cooperative firm. If a user of an asset does not receive any residual returns the user does not have an incentive to maintain the asset. The property theory emphasizes that alignment of residual returns and residual control will make the use of Landshypotek's assets more efficient.

### **2.2.2.1 Portfolio problem**

The portfolio problem occurs when members face constraints in diversifying their portfolio (Jensen & Meckling, 1979). The constraints are an effect of the non marketability of cooperative equity which unable the members to spread their holdings over different firms and assets, to adjust for uncertainty and adapt their portfolio to their individual risk aversion. This leads to a non-Pareto optimal situation because members are forced to bear risk that could be avoided through diversification. This could be a problem for Landshypotek's members because their invested capital in the cooperative is fixed for the whole lending period. The same problem occurs when members' patronage refunds and dividends capitalize within the cooperative. The members have no possibility to invest this capital somewhere else.

According to Jensen & Meckling (1979) the members therefore experience an additional net deadweight welfare loss (deadweight welfare loss is the total loss of surplus that results from price controls and inefficient markets Pindyck & Rubinfeld, 2001). The non-Pareto optimal situation is also an effect of inefficient distribution of risk that occurs because there is no room for individuals to reduce their risk exposure through diversification. This might also be a problem for Landshypotek's members because reduced possibility of diversification strategy. Because of these allocation problems, members who seek to invest in a cooperative, as an alternative to investor-owned firms, will demand a higher return on their investment. Members will also be more reluctant to invest in new cooperative equity than shareholders in investor-owned firms (Royer, 1995).

### **2.2.2.2 Free-rider problem**

A cooperative is owned by a number of members and as a consequence the firm's assets are owned collectively (Vitaliano, 1983,). Landshypotek's equity amounted to barely 3,4 billion SEK 2010 (Landshypotek, 2011, 2). The members' contributed capital constituted just over 1 billion of the equity and the remaining 2,4 billion was Landshypotek's unallocated equity. The contributed capital is provided by the members and is therefore individually owned but unallocated equity is capital that originates from the business surplus and that is not assigned or designated to a specific member (Dunn, 1986). Landshypotek's unallocated equity therefore constitutes the members' collectively owned capital.

The unallocated equity works as a filter and deteriorates the communication between members and the cooperative firm (Nilsson, 2001). Since the unallocated equity is owned collectively the members do not have to bear the full consequences of their actions and as a result certain market mechanisms do not work properly in a cooperative. An example of this is that market signals from owners do not reach the management. The lack of market signals affects how the agent (management) should run the firm and what investments should be

undertaken. These problems contribute to difficulties in obtaining capital and make the resource allocation sub-optimal. This inefficient use of capital makes the lenders more cautious and result in higher financial costs for the cooperative. As a result the value of the cooperative firm is reduced.

New members are seldom required to pay an entrance fee or make an investment in the cooperative that equals the value of the received rights (Vitaliano, 1983). As a result, new members gain access to the collectively owned capital that older members have accumulated, acquire the right to participate in the decision process and the right to the cooperative's residual cash flow against little or no counter performance. These rather small entrance fees tend to dilute the cooperative's equity because the equity remains unchanged while the right to the collectively owned capital is dispersed among a larger number of members (Nilsson, 2001). This leads to low capital growth and difficulties to encourage members to invest capital in a cooperative organization. Further, when a member leaves a cooperative he will not have any access to the collectively owned capital, even though he has contributed to its buildup. This encourages members to be free-riders. Members who become "free-riders" try to benefit from the cooperative without contributing too much, the members therefore prefer borrowed capital repaid by future members rather than investing in the firm (Jensen & Meckling, 1979).

### **2.2.2.3 Horizon problem**

*"A horizon problem arises when an owner's claim on the net cash flow generated by an asset is shorter than the productive life of the asset"* (Porter & Scully, 1979, p. 495).

Members of a cooperative have different planning horizons (Nilsson, 2001). Some members are new and others consider quitting their membership in Landshypotek. Because the fact that residual rights cannot be transferred, members leaving the cooperative will lose their share of value of the collectively owned capital (Hansmann, 1988). This issue leads to horizon problems, which affect the members' investment decisions. The horizon problem creates differences in investment preferences among the members because they can only benefit from investments over the time horizons of their expected membership in the cooperative (Vitaliano, 1983). Members leaving Landshypotek in a short period of time have no incentives to invest in projects with long payback period (Nilsson, 2001). This tends to make it difficult for Landshypotek to make optimal investments and therefore hamper the development of the cooperative firm. This may lead to that some profitable long-term investments never will be undertaken. This could prohibit the capital growth which further reduces the value of the cooperative.

### **2.2.3 Cost of capital**

Economic theorists often "side-step" the cost of capital problem by assuming that assets, like bonds, could be considered to have known future net cash flow. This assumption leads to the conclusion that cost of capital simply is the risk free rate of interest on bonds. According to Lumby & Jones *"The discount rate that reduces the sum of a share's expected future dividend flow to a present value equal to its market price is called the cost of equity capital"* (Lumby & Jones, 2003, p. 382). For Landshypotek this means that it is the minimum required rate of return that Landshypotek demands from their members for lending capital i.e. Landshypotek's minimum required rate of return is the members' cost of capital. The minimum required rate of return that Landshypotek can demand from the borrowers is the rate of return that makes

the net present value (NPV) of the loan equal to zero (Brealey et al, 2003). Equation (1) shows the formula for the net present value of a loan with a time horizon of one year.

$$NPV = +L_0 - \frac{C}{(1+r)} \quad (1)$$

$L_0$  = borrowed capital,  $r$  = rate of return,  $C$  = net cash flow

By setting  $NPV = 0$  it is possible to calculate the minimum required rate of return that Landshypotek can demand by solving  $r$  for equation (1).

$$r = \frac{C}{L_0} - 1$$

If  $C > L_0 \rightarrow r > 0$ , and if  $C = L_0 \rightarrow r = 0$

(2)

$L_0$  = borrowed capital,  $r$  = rate of return,  $C$  = net cash flow

The expression described above shows how to calculate the required rate of return that makes the NPV of a short-term loan over one year equal to zero i.e. the members' cost of capital. Unfortunately there are no satisfactory way of defining the members' cost of capital for a long-term loan (Brealey et al, 2003). The best method is to use the internal rate of return (IRR). The internal rate of return is defined as the rate of return that makes the net present value equal to zero. To find the internal rate of return for a long-term loan that lasts for  $T$  years, IRR must be solved for the following expression.

$$NPV = L_0 + \sum_{t=1}^T \frac{C_t}{(1+IRR)^t} = 0 \quad (3)$$

$C_t$  can be  $> 0$ ,  $= 0$  or  $< 0$  depending on the specific cash flows per year.

$L_0$  = borrowed capital, IRR = internal rate of return,  $C_t$  = net cash flow year  $t$

Internal rate of return is usually found through numerical techniques. Different values for IRR are tested until the IRR that makes the NPV equal to zero is found (Brealey et al, 2003). This is often done by plotting different combinations of NPV and IRR in a graph and then connecting the points with a line and read off the internal rate of return at which  $NPV = 0$ . It is also possible to use a special program to calculate the internal rate of return. In this study the internal rate of return and thereby the members' cost of capital for borrowing capital in Landshypotek is calculated with the function for IRR in Excel.

### 2.2.3.1 Old model

With the model that Landshypotek uses today, a member that borrows capital has to pay interest on the borrowed capital and amortization. As a member in Landshypotek the borrower also has the right to patronage refund and interest on contributed capital. In this study it is assumed that the members use a straight-line amortization. The member's cash flows per year for a long-term loan are displayed in figure 14.

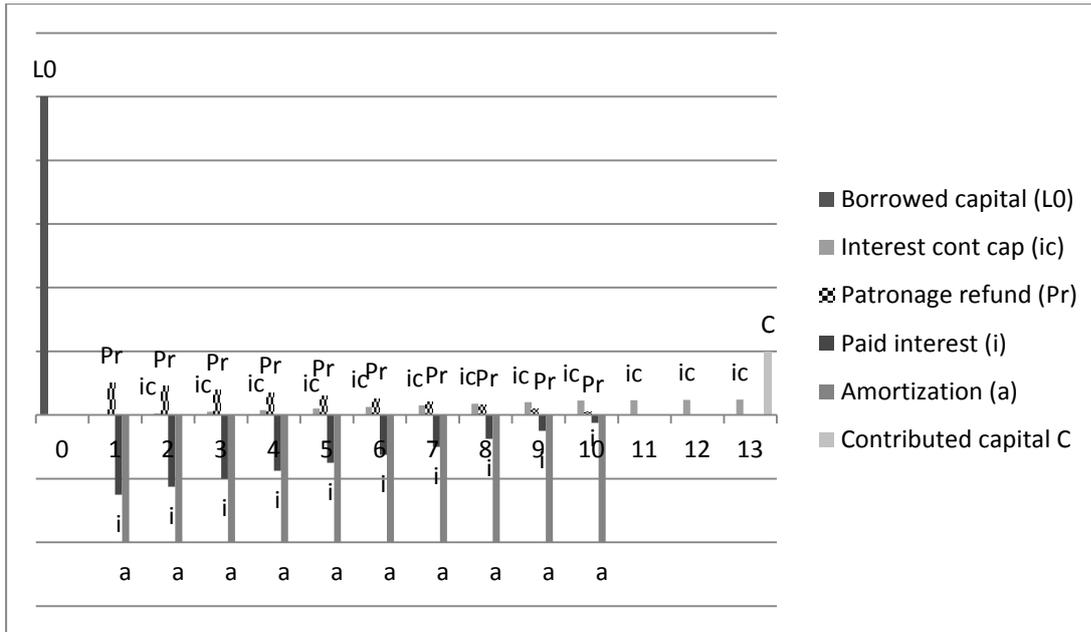


Figure 14. The members' cash flow per year for a long-term loan of ten years. Source own arrangement

Figure 14 shows a member's cash flows per year for a long-term loan with a time horizon of ten years. The purpose of the figure is to illustrate the cash flows that occur each year and the time horizon of ten years is chosen because of the figure's limited space. The figure also reveals that the contributed capital is repaid first three years after completed membership. The member uses a straight-line amortization and as a result the paid interest decreases each year. The cash flows per year would be different if the member used an annuity loan, but this is not considered in the study. The patronage refunds depend on the amount of interest paid and the value of patronage refund that the member receives each year therefore also decreases. The figure also illustrates that the amount of interest on contributed capital per year increases. This is because earlier years' patronage refund and interest on contributed capital are capitalized on the equity account until it reaches eight percent of the borrowed capital.

In the model that Landshypotek uses today, the member's net cash flow year  $t$  ( $C_t$ ) consists of paid interest year  $t$  ( $i_t$ ), amortization year  $t$  ( $a_t$ ), patronage refund year  $t$  ( $Pr_t$ ), interest on contributed capital year  $t$  ( $ic_t$ ) and interest on the member account year  $t$  ( $im_t$ ). If the member's contributed capital is less than eight percent of the borrowed capital, the interest on contributed capital and patronage refund are capitalized on the equity account and repaid as contributed capital first three years after terminated membership. But if the member has reached the input limit, both the interest on contributed capital and patronage refund are paid out directly. To calculate the member's cost of capital for a long-term loan in the model that Landshypotek uses today, paid interest, amortization, patronage refund, interest on contributed capital and interest on the member account are evaluated by redefining equation (3). IRR is then solved for the following expression.

$$NPV = L_0 + \sum_{t=1}^T \frac{(ic_t + Pr_t + im_t - i_t - a_t)}{(1 + IRR)^t} + \frac{(C_{T+3} + M_{T+3})}{(1 + IRR)^{T+3}} = 0 \quad (4)$$

$L_0$  = borrowed capital,  $ic_t$  = interest on contributed capital year  $t$ ,  $Pr_t$  = patronage refund year  $t$ ,  $i_t$  = paid interest year  $t$ ,  $a_t$  = amortization year  $t$ ,  $im_t$  = interest on the member account year  $t$ ,  $C_T$  = contributed capital year  $T$ ,  $M_T$  = proceeds on member account year  $T$

**2.2.3.2 New model**

The intended change of contributed capital implies that a member that borrows capital still has to pay interest on the borrowed capital and amortization and also has the right to patronage refund. But with the intended change, the interest on contributed capital is replaced with dividend. The member’s cash flows per year for a long-term loan in the new model are shown in figures 15, 16 and 17.

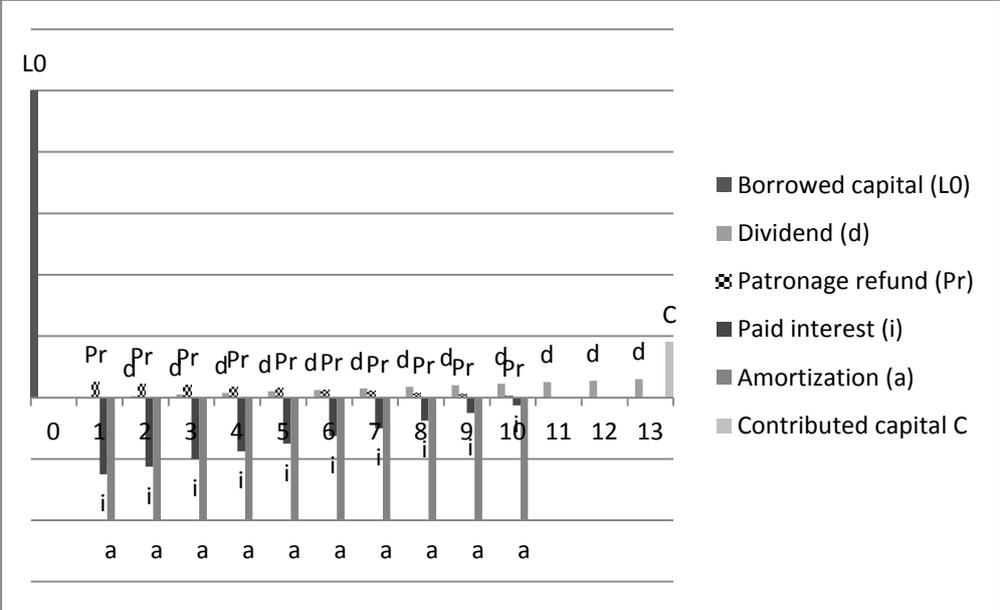


Figure 15: The member’s cash flow per year for a long-term loan of ten years without active contribution of contributed capital. Source own arrangement

Figure 15 shows the cash flows per year for a long-term loan with a time horizon of ten years for a member that has chosen not to actively contribute with capital in Landshypotek. The purpose of the figure is to illustrate the cash flows that occur each year. The time horizon of ten years is chosen because of the figures limited space. The figure also illustrate that the contributed capital is repaid first three years after terminated membership. The member uses a straight-line amortization and as a result the paid interest decreases each year. The patronage refunds depend on the amount of interest paid and the value of patronage refund that the member receives each year therefore also decreases. The figure also shows that the amount of dividend on contributed capital per year increases. This is because earlier years’ patronage refund and dividend on contributed capital are capitalized in the equity account until it reaches four percent of the borrowed capital. If the member’s contributed capital is less than four percent of the borrowed capital, the dividend on contributed capital and patronage refund are capitalized in the equity account and repaid as contributed capital first three years after termination of the membership. However, if the member has reached the input limit, both the dividend on contributed capital and patronage refund are paid out directly to the member.

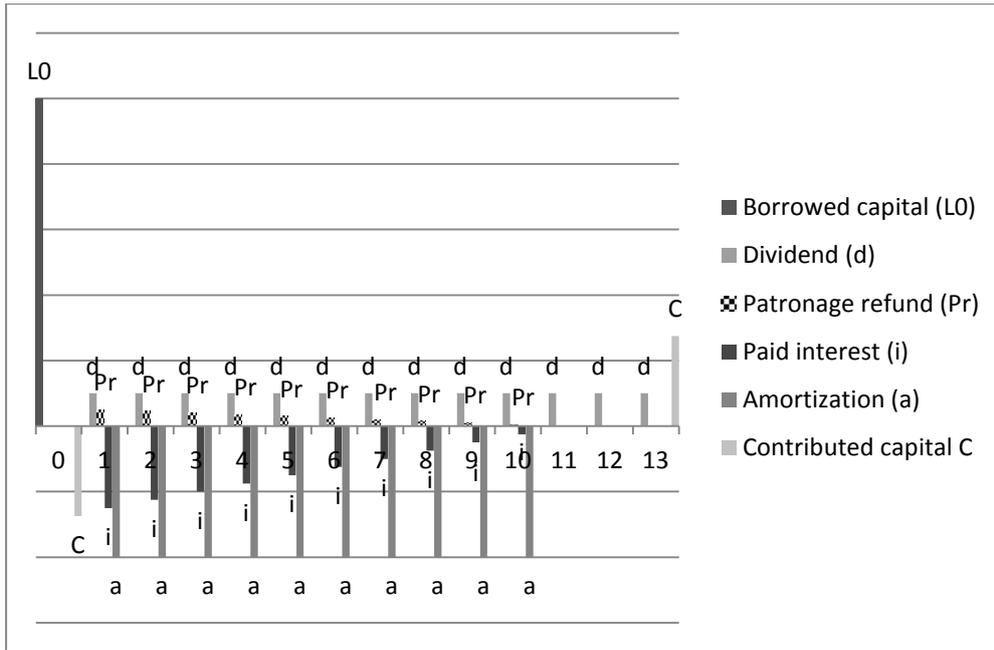


Figure 16. The member's cash flow per year for a long-term loan of ten years with a full active contribution of contributed capital of four percent of the borrowed capital. Source own arrangement

Figure 16 shows the cash flows per year for a long-term loan with a time horizon of ten years for a member that has chosen to actively contribute with four percent of the borrowed capital, thus reaching the input limit. The figure also illustrates that the contributed capital is repaid first three years after completed membership. The member uses a straight-line amortization and as a result the paid interest decreases each year. The patronage refunds depend on the amount of interest paid and the value of patronage refund that the member receives each year therefore also decreases. The figure also displays that the amount of dividends on contributed capital per year is unchanged. The explanation is that the member has reached the input limit through an active contribution of contributed capital. Consequentially, the patronage refunds and dividends are therefore not capitalized on the equity account but paid out directly each year.

To calculate the member's cost of capital for a long-term loan after the implementation of the intended change of contributed capital, paid interest, amortization, patronage refund and dividend on contributed capital are evaluated by applying equation (3). IRR is solved for the following expression.

$$NPV = L_0 + \sum_{t=1}^T \frac{(d_t + Pr_t - i_t - a_t)}{(1 + IRR)^t} + \frac{C_{T+3}}{(1 + IRR)^{T+3}} = 0 \quad (5)$$

$L_0$  = borrowed capital,  $d_t$  = dividend on contributed capital year  $t$ ,  $Pr_t$  = patronage refund year  $t$ ,  $i_t$  = paid interest year  $T$ ,  $a_t$  = amortization year  $t$ ,  $C_T$  = contributed capital year  $T$

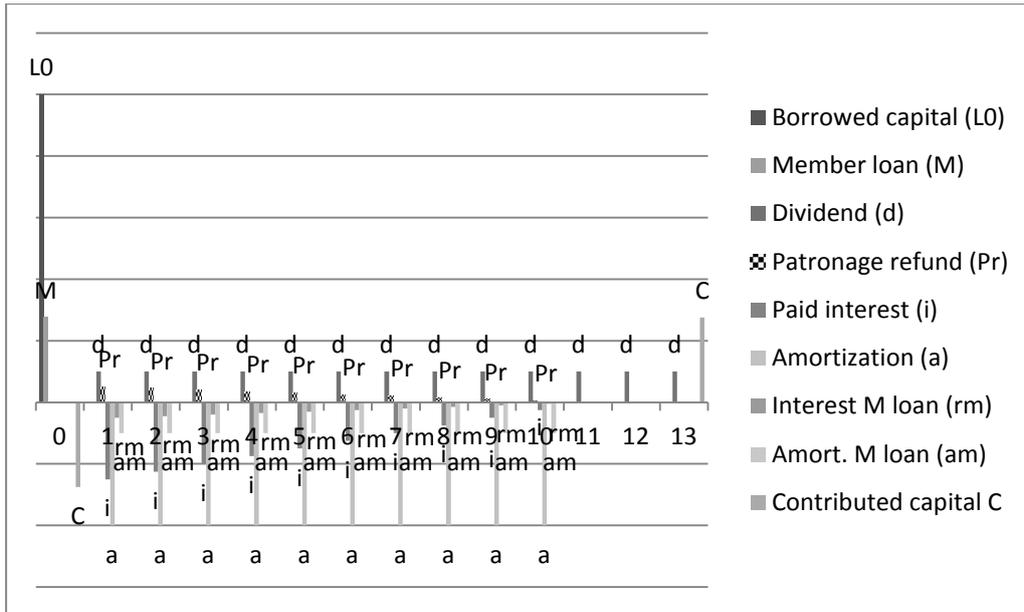


Figure 17. The member's cash flow per year for a long-term loan of ten years with an full active contribution of contributed capital of four percent of the borrowed capital through the use of the "member loan". Source own arrangement

Figure 17 display the cash flows per year for a long-term loan with a time horizon of ten years for a member with a full active contribution of capital through the use of the "member loan". The figure also shows that the contributed capital is repaid first three years after completed membership. The member uses a straight-line amortization for both the borrowed capital and the "member loan" and as a result paid interest on both loans decreases each year. The patronage refunds depend on the amount of interest paid on the borrowed capital and the value of patronage refunds that the member receives each year therefore also decreases. The figure also illustrates that the amount of dividend on contributed capital per year is unchanged. This is because the member has reached the input limit through an active contribution of contributed capital and the patronage refunds and dividends are therefore not capitalized on the equity account but paid out directly each year.

To calculate the cost of capital for a member that chooses to actively contribute with capital through the use of the "member loan", the interest and amortization on the "member loan" has to be added to equation (5). IRR is then solved for the following expression.

$$NPV = L_0 + \sum_{t=1}^T \frac{(d_t + Pr_t - i_t - a_t - Rm_t - Am_t)}{(1 + IRR)^t} + \frac{C_{T+3}}{(1 + IRR)^{T+3}} = 0 \quad (6)$$

$L_0$  = borrowed capital,  $d_t$  = dividend on contributed capital year  $t$ ,  $Pr_t$  = patronage refund year  $t$ ,  $i_t$  = paid interest year  $t$ ,  $a_t$  = amortization year  $t$ ,  $Rm_t$  = paid interest on the "member loan" year  $t$ ,  $Am_t$  = amortization on the "member loan" year  $t$ ,  $C_T$  = contributed capital year  $T$

## 2.3 Hypotheses

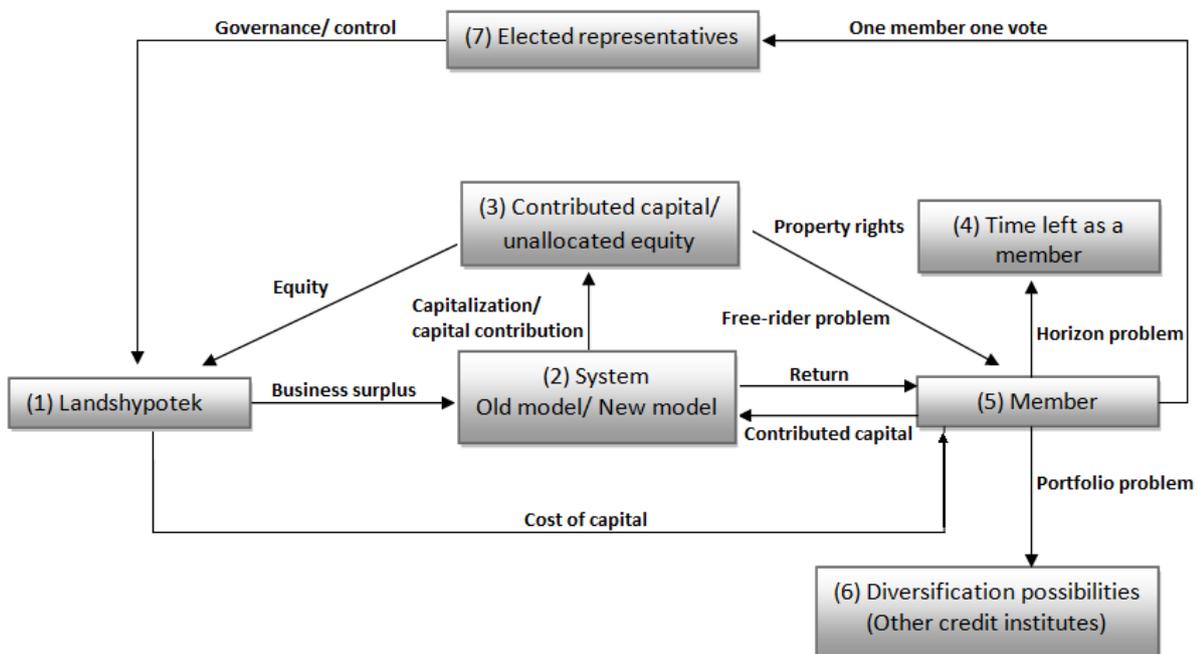


Figure 18. Schematic model describing the theoretical relationship between Landshypotek and its members.  
Source own arrangement

Figure 18 illustrates the relation between Landshypotek and its members and also the problems that can occur in different states of the relationship. In the figure, the system constitutes both Landshypotek's old and new model.

1. Members will be reluctant to increase their equity shares because Landshypotek applies "one member one vote" (Cook et al, 2011). The hypothesis is illustrated in figure 18 between box 5 and 7.
2. In comparison with investor-owned firms stock, cooperative equity is not marketable because the distribution of earnings in a cooperative is based on patronage and not investment (Lerman & Parliament, 1993). Because of the non marketability of Landshypotek's cooperative equity their members will be reluctant to increase their equity shares. The hypothesis is illustrated in figure 18 between box 2 and 5.
3. Due to the non marketability of Landshypotek's cooperative equity their members will be more interested to invest in investor-owned firms than investing in Landshypotek through an active contribution of capital. (Lerman & Parliament, 1993). The hypothesis is illustrated in figure 18 between box 5 and 6.
4. The non marketability of Landshypotek's cooperative equity leads to lack of transferability and liquidity which reduces the members' possibility to adapt their portfolio to their individual risk aversion (Jensen & Meckling, 1979). This leads to an additional net deadweight welfare loss for Landshypotek's members who will demand a higher rate of return on their contributed capital than they would on an investment in an investor-owned firm. The hypothesis is illustrated in figure 18 between box 2 and 5.

5. Rather than earning return on invested capital, members will seek to benefit directly through their dealings with the cooperative (Lerman & Parliament, 1993). Landshypotek's members will therefore prefer a lower interest rate on borrowed capital instead of a high dividend on contributed capital. The hypothesis is illustrated in figure 18 between box 2 and 5.
6. When there are no incentives for members to invest because they only can obtain benefits through their dealings with the cooperative, none investing members become free-riders because they can harvest benefits that they have not fully contributed to (Harris et al, 1996). The intended change of contributed capital will therefore reduce the risk of the free-rider problem because the dividend on contributed capital creates an incentive for the members to invest capital in Landshypotek. The hypothesis is illustrated in figure 18 between boxes 2, 3 and 5.
7. The horizon problem creates differences in investment preferences among the members because they can only benefit from investments over the time horizons of their expected membership in the cooperative (Vitaliano, 1983). Members with a long time remaining in Landshypotek therefore tend to be more positive towards the intended change of contributed capital compared to members with a short time left and therefore also be more interested in investing capital in Landshypotek. (Nilsson, 2001). The hypothesis is illustrated in figure 18 between box 4 and 5.

## 3 Method

The chapter contains the method chosen to achieve the studies aim. The chapter begins with a motivation of the chosen method. Then follows a description of the qualitative research interview. The chapter also contains a narration of the course of action. The chapter ends with an exposition of the selected members and structure of the performed interviews.

### 3.1 Choice of method

The thesis is mostly conducted as a qualitative case study. The case study method is chosen because this research is based in real life situations and shall consist of a rich review of Landshypotek's members' attitudes (Merriam, 2006). The empirical material consists of qualitative research interviews with members in Landshypotek and a study of scenarios regarding the members' cost of capital. The purpose of the interviews is to investigate the member's attitudes towards the intended change of contributed capital and thereby examine the hypotheses that are listed in chapter 2.3. The case study consists of four scenarios and the purpose is to examine how a member's cost of capital is affected by the intended change of contributed capital.

The qualitative research interview approach is chosen because Landshypotek's change of contributed capital is something that has not yet been materialized. It therefore might be difficult for the members to for example take part in a survey regarding their attitudes towards an issue that they have limited knowledge about. A survey approach was considered as method to collect data. A survey has many advantages such as lower cost per respondent in comparison with the cost per interviewee in a qualitative research interview (Ejlertsson, 1996). The survey can be performed within a larger geographical area, include a larger amount of respondents and is less time consuming than interviews. In a survey the respondents do not feel the same pressure as in an interview situation because they can answer the questionnaire at home in peace and quiet. The questions in a questionnaire are standardized which generates answers that are easy to interpret and also eliminates the "interviewer effect" i.e. the interviewer's way of asking questions.

A survey has some disadvantages that make the method unfavorable in this study. A survey should not engage the respondent for more than 30 minutes and as a result there is room for fewer questions compared to an interview that do not have the same time constraint (Ejlertsson, 1996). The time constraint makes the survey approach unfavorable because of the large amount of information that the member has to review concerning Landshypotek's intended change of contributed capital and the need for a lot of questions to capture the members' attitudes. In a survey there is also a risk of many unanswered questionnaires. If the topic is complicated and if the respondent has limited knowledge about the topic, as is the case for the members in this study, it increases the risk of a large amount of unanswered questionnaires. A questionnaire also excludes the possibilities to obtain further information. The open questions in a survey only partly provide the possibility of detailed answers. The interview approach provides the possibility to ask more complicated and in depth questions and if necessary review and explain certain parts of Landshypotek's change of contributed capital (Kvale, 1997). This is a necessary possibility due to the study's detailed nature. The interview also gives the members the opportunity to ask questions if something is unclear and therefore eliminating misunderstandings. This increase the reliability and validity of the interview and therefore the quality of the results.

The scenario approach for the members' cost of capital is also chosen because Landshypotek's change of contributed capital is something that has not yet been materialized. It is therefore difficult to investigate how the members' cost of capital has changed as a result of the intended change of contributed capital. The study therefore examines the effect that the intended change can have on a member's cost of capital in four hypothetical scenarios.

## 3.2 Qualitative research interviewing

*“The qualitative research interview attempts to understand the world from the subjects' points of view, to unfold the meaning of their experiences, to uncover their lived world prior to scientific explanations”* (Brinkman & Kvale, 2009, p. 1).

An interview is a professional conversation that goes beyond spontaneous exchange of views between partners in everyday life (Brinkman & Kvale, 2009). The interview has a purpose and a structure and obtains thoroughly tested knowledge through a questioning and listening approach. The purpose of the qualitative research interview is to provide an understanding of a versatile and controversial world (Kvale, 1997). The topic of the interview is introduced by the researcher who critically follows up the answers provided by the subject through carefully chosen questions (Brinkman & Kvale, 2009). The qualitative research interview is an exchange of opinions between partners (Kvale, 1997), but the research interviewer defines and controls the situation and the research interview is therefore not a conversation between equal partners (Brinkman & Kvale, 2009). The qualitative research interview is theoretically a semi-structured interview that is neither a completely opened conversation nor a strictly structured survey. The interview is carried out according to an interview guide that can include questions, but more importantly guides the interview through different themes. The interview is normally recorded and together with the printed interview guide it serves as the material for further analysis. But for the gathered material to be useful it needs to be interpreted through a theoretical perspective (Trost, 1997).

The purpose of the qualitative interview is not to obtain quantitative results, instead it seeks to receive qualitative knowledge expressed in a general way (Kvale, 1997). But the qualitative research interviewer is not interested in general opinions. The intention is to obtain specific answers that contain nuanced descriptions of various aspects. The interview questions can produce different answers depending on how the interviewer is perceived amongst the interviewees. It is therefore important for the interviewer to use the same approach in every interview. This can partly be achieved through the use of an interview guide, but the intention is not to present pre-made divisions and schematic claims. Instead the interviewer should be open to new ideas and let the interviewee draw their own conclusions and come to new insights as the interview progresses. A well conducted interview can be an enriching experience for the interviewee who may receive new and useful insights.

### 3.2.1 Interview quality

The interview represents the material for further analysis (Kvale, 1997). The quality of the results and the final report therefore depends on the quality of the initial interview. As shown in figure 19 the theory for qualitative research interviews has listed a few quality criteria.

The amount of spontaneous, rich, specific and relevant answers from the interviewee	Shorter questions and longer answers are preferred	The degree in which the researcher follows up and clarifies the meaning of the answers
The ideal interview is interpreted continuously as the interview progresses	Seek to verify the interpretations of the interviewee's answers during the interview	The interview should be self-communicating

Figure 19. Quality criteria for research interviews. Source own arrangement according to Kvale 1997

Figure 19 shows Kvale's six quality criteria for qualitative research interviews. The bottom three criteria are dependent on the interviewer and his or her ability to perform the interview (Kvale, 1997).

The interviewer is the research tool and to receive qualitative results the interviewer needs to be competent and possess a craftsmanship. The interviewer is also required to understand why and how to perform the interview and what the interview is about. A self-communicating interview means that it should be possible to read and understand the interview without explanations.

A good interviewer possess great knowledge of the topic in question and are able to continuously make decisions about how and which questions to ask and what aspects of the answers to follow up and interpret (Kvale, 1997). The quality of the interview depends on the interviewer's ability to interpret and critically test the reliability and validity of the answers. It is important to be explicit, ask short and simple questions and avoid academic language. The ability to be desirous makes it possible for the interviewer to link answers to what has been said earlier in the interview and get the answers developed and verified. An interview with little or no follow-up questions will give the interview limited credibility (Troost, 1997). The interviewer should be structured and present the interviews aim and procedure (Kvale, 1997). The interviewer should also be open to new aspects and let the subject draw their own conclusions but still maintain some control so that the purpose of the interview is achieved. Allowing the subject to always finish their sentence, being sensitive to their feelings towards the topic and to interpret not only what is said but also how it is said increases the quality of the interview. To further increase the quality it is good to, at the end of the interview, present some of the results from the interview and also to ask if the interviewee has any questions or anything to add.

There are several techniques to learn how to be a god interviewer (Kvale, 1997). Reading books about interview techniques, reading actual interviews and observing more experienced interviewers are a few of these techniques. But the primary way to learn is through experience from actual interviews. To gain self-confidence, interviewers often perform pilot interviews before the actual research interviews. The pilot interviews help the interviewer increase their ability to create a secure and stimulating interaction with the interviewee and thereby increase the quality of the research interview.

The issue of leading questions is probably the problem within research interviewing that gets the most attention (Kvale, 1997). It is often discussed that leading questions influence the subject's answers and can even make them change a previous statement, thus affecting the quality of the results. But it is also a well documented fact that an insignificant reformulation of a question can influence the subject's answers. Even if the formulation of the research questions can affect the answers, it is often necessary to use leading questions depending on the topic and aim of the study. This is especially useful in a qualitative research interview where the interviewer can use leading questions to test the reliability of subject's answers and verify his own interpretations. Leading questions may therefore increase the quality of the results and the aim should therefore not be to avoid leading questions but to recognize their significance and give the reader the possibility to assess their influence and the reliability of the results.

### 3.2.2 Ethics

Interviewing is a moral undertaking and the interviewee should always be entitled to his or her integrity and dignity (Troost, 1997). It is therefore necessary to be able to promise the interviewee absolute secrecy and confidentiality. This could constitute a problem in the presentation of the results because it is necessary to avoid information that could lead to the identification of the interviewee. If it is necessary to use information that reveals the identity, the information must be approved by the interviewee (Kvale, 1997). However, presenting information that makes it possible for the interviewee to identify himself is not considered unethical, but it is important to respect the interviewee's integrity and not present information that could be perceived as intrusive (Troost, 1997).

The presentation of the results should only include information that is necessary for the analysis of the material and that contributes to the understanding of the subject without leading to identification (Troost, 1997). Information about the subject can easily be made confidential by using anonymous data. For example it is not always necessary for the reader to know the interviewees exact age, education or hometown. Instead the presentation can declare that the interviewee is a middle aged man with higher education from the middle parts of Sweden. Another ethical aspect that is important to consider in the presentation of the results is the use of quotes. Quotes that can reveal the identity of the interviewee are strictly banned and direct quotes that the interviewee can perceive as intrusive should also be avoided.

There is a conflict between the ethical aspects of confidentiality and the principles of scientific research (Kvale, 1997). Confidentiality minimizes the possibility for other researchers to reproduce and verify the validity of the results because the information about the participants has been made anonymous. But anonymity can also increase the quality of the results because the interviewee's incentives to answer sincerely increases when they know that the information will be confidential.

## 3.3 Course of action

Before gathering the empirical material, a qualitative literature review is conducted in order to obtain background material about Landshypotek, gather literature for the theory chapter and method and also to investigate what earlier studies have concluded. The background material for Landshypotek is gathered from Landshypotek's website and through personal contact with Landshypotek's chief financial officer Björn Ordell. The literature for the theory, method and

earlier studies conclusions are gathered from databases available at SLU, such as Web of science, Scopus, Science direct, Jstor, LUKAS, LIBRIS and Epsilon. Keywords that are used to search in the databases are contributed capital, unallocated equity, collectively owned capital, bonus shares, cooperative principles, capital acquisition, patronage refund, property rights, free-rider problem, horizon problem, portfolio problem, cost of capital and qualitative research interview.

After performing the literature review, 7 hypotheses are constructed based on the gathered theories. Figure 18 in chapter 2.3 is also created in order to schematically illustrate the theoretical relation between Landshypotek's financial models and the hypotheses. The hypotheses constitute the base for the questions that are asked in the interviews with Landshypotek's members and as a result, 46 questions are constructed and organized into an interview guide as shown in appendix 2. To gain experience and to test the questions validity, three pilot interviews are performed with members in Landshypotek. Through the pilot interviews we ensure that the structure of the interview guide leads the interview in the right direction and help us achieve the aim. In the end the results from the pilot interviews held such high quality that the decision was made to include the pilot interviews in the study's results. The analysis and discussion are based on the results from the performed interviews that are structured as described in chapter 3.3.1 below and the calculations of a member's cost of capital. The results are compiled into different categories in relation to the hypotheses. According to Merriam (2006) this is an adequate method to use in the analysis of the results. The members' answers are divided into categories to see patterns of similarities and differences. These patterns are analyzed in order to confirm or reject the hypotheses.

Landshypotek provides the contact information for a large number of members and the interviewees are selected according to the criteria described in chapter 3.3.2. The members who are selected for an interview are provided with a factsheet (see appendix 1) before the interview. The fact sheet contains a short presentation of us, the study's aim and Landshypotek's involvement in the study. Furthermore, the factsheet contains a presentation of Landshypotek and their need for equity in order to expand the business. The factsheet also describes the financial model that Landshypotek uses today and the intended change of contributed capital.

After the interviews the results are structured and presented as shown in chapter 4.1. The results from each interview are sent to the respective member who are given the opportunity verify and comment on the content and if necessary suggest changes.

### 3.3.1 Interview structure

Before starting the actual interview, a short presentation of ourselves, the study's aim and Landshypotek's involvement in the study is made. The members are also presented with a description of the interview procedure. To increase the incentives to answer sincerely, all interviewed members are made anonymous and promised complete confidentiality at the beginning of the interview. To further increase the quality of the result each member is presented with some of the results and asked if they have any questions or anything to add at the end of the interview. All interviews are recorded but notes are also taken during the interview to catch the substantial.

The interviews are performed according to an interview guide (see appendix 2) to avoid random influences. An interview guide can be structured in different ways (Widerberg, 2002). A very structured guide reduces the interaction and a less structured guide can provide more

detailed answers. In this study a semi-structured interview guide is chosen because it provides the possibility to ask follow-up questions and receive more detailed answers, thus increasing the interviews creditability and the quality of the results (Troost, 1997). These kind of structured interviews are preferred when the aim is to test hypotheses (Merriam, 2006). The interview guide guides the interview through different themes and consists of 46 questions that are presented according to the interview guide to secure that they are perceived equal amongst all interviewed members.

The interview begins with “Opening questions” that contains some background questions about the members, their business and their connection to Landshypotek. These questions are easy to answer and are a good way to get the conversation started. The next section “Knowledge based questions” consists of questions about Landshypotek, the contributed capital and the differences in investing in a cooperative compared to a joint-stock-company. These questions are used to investigate if the members’ level of knowledge is enough to engage in a meaningful interview about Landshypotek’s intended change of contributed capital. If not we review the topic together and describe in detail the change that Landshypotek considers.

The section “Investment related questions” contains questions about the members’ interest of investing capital in Landshypotek. The members are questioned about their expected rate of return, size of the invested contributed capital and the risk aspect. These questions focus on Landshypotek in general and not so much on the intended change of contributed capital. The purpose of these questions is primarily to receive attitudes that make it possible to analyze hypotheses 2, 3 and 4. In the section “Behavior and attitudes” the focus lies on the intended change and the members’ attitudes are investigated through questions about behavior and feelings towards the intended change of contributed capital. The purpose of this section is to attain answers that can be used to analyze hypotheses 5, 6 and 7. The answers from the section “Ownership” are primarily used to analyze hypothesis 1. The members are asked about their attitudes towards proportional voting rights and its effect on their willingness to invest capital. The interview ends with the section “Concluding remarks”. Here the members are asked to review the entire change that Landshypotek is considering and provide an overall perception of the intended change of contributed capital.

### 3.3.2 Selection of members

The optimal amount of interviews are usually between 5 and 25 performed interviews (Kvale, 1997). This study contains interviews with twelve of Landshypotek’s members who have been chosen from certain criteria. As shown in table 4 the selection criteria are age, borrowed capital, “elected representative” and “non elected representative” in Landshypotek. These criteria are chosen to receive views from members with different backgrounds. These factors could have diverse impacts of the members’ attitude towards the intended change of contributed capital. The age is of interest because of the horizon problem. Older members might have a shorter planning horizon than younger members. The property rights are affected by the size of the borrowed capital due to the members’ possibilities to invest different amounts. To receive further points of view, three “elected representatives” are chosen. An “elected representative” is supposed to have a greater knowledge about the subject than the common member and might therefore respond in a different way.

The members’ education and their time left as members in Landshypotek were also considered as selection criteria. But because of the difficulties to ensure those criteria they

were rejected. The problem is that Landshypotek has no information about the members' education and because not all members amortize their loans it is hard for Landshypotek to determine their time left as members (pers. com Ordell, 2011). The study includes twelve respondents due to time and geographical limits. The amount of respondents is also limited by the selection criteria that make it difficult to find appropriate members in a reasonable near geographical region. Landshypotek provided a list of members according to the selection criteria and as shown in table 4 twelve members are chosen and divided into three groups based on their borrowed capital.

Table 4. Distribution of selected members according to the criteria. Source own arrangement

Age/Borrowed capital	1 million SEK	5 million SEK	>20 million SEK
20-39 years	X	X	X
40-59 years	X	X	X
60+ years	X	X	X
“Elected representative” in Landshypotek	One “elected representative”	One “elected representative”	One “elected representative”

The respondents consist of three groups. In the first group all members have a debt of 1 million SEK. In the next group the members have a 5 million SEK loan. The last group consists of members with loans larger or equal to 20 million SEK. Each group consists of one member who is between 20-39 years old, one member who is between 40-59 years old and one member who is 60 years old or older. There is also one “elected representative” in each group. Most of the respondents are located in the Uppsala and Enköping area. Enköping is situated 50 kilometers from Uppsala. One respondent is located outside the region around “Mälardalen” about 250 kilometers from Uppsala. Another member lives in Flen which is around 150 kilometers from Uppsala. Two respondents are located in Stockholm. A discussion of how the members' geographic location affects the reliability and validity of the study's results is presented in chapter 4.3.

### 3.3.3 Cost of capital

In order to investigate how a member's cost of capital is affected by Landshypotek's intended change of contributed capital, calculations are made of a member's cost of capital in four different scenarios (appendix 3, 4, 5 and 6). The calculations are based on a new member who enters Landshypotek in order to borrow 10 million SEK over 25 years.. In the calculations the assumption is made that the member uses straight-line amortization and that the membership is terminated at year 25 after the last amortization. The assumption is also made that the proceeds on the member account and equity account are repaid three years after the terminated membership (year 28). The interest rates, size of patronage refund and dividend on contributed capital that are used in the calculations are based on information from Landshypotek. These are assessed as relevant for the study because they are the same figures that Landshypotek use when they present the intended change of contributed capital to the “elected representatives”.

The four scenarios are created to illustrate the differences between the financial model that Landshypotek uses today and the possibilities that are associated with the intended change of contributed capital. The first scenario constitutes a member that borrows capital in Landshypotek's old financial model. Scenario 2,3 and 4 all contains a member that borrows

capital after Landshypotek's implementation of the change of contributed capital. The reason that there only is one scenario for the old model and three scenarios for the new model are that a member that borrows capital in the old model does not have any choices to make. Whereas a member that borrows capital in the new model can choose to not contribute with capital or to actively contribute with capital either through own assets or with a "member loan". The member's cost of capital in the different scenarios is presented in chapter 4.2.

## 4 The empirical study

This chapter presents the results of the interviews one by one. The members are structured in order of their size of borrowed capital, beginning with the members with loans amounting to 1 million SEK. The chapter also contains a summary of the interviews in tables and figures. The results of the four different costs of capital scenarios are also presented. The chapter ends with a review of the results reliability and validity.

### 4.1 Qualitative interviews

#### 4.1.1 Member 1

##### *Description of member 1*

Member 1 is a part-owner of agricultural and forestry land. There is no active farming, but there are some forestry operation and rental business. The member is between 20-39 years old and has been a member in Landshypotek since 2005. The respondent has no time limit for the membership. The borrowed capital is approximately 1 million SEK, which is divided across several part-owners. Since the loan is divided over many partners the member's contributed capital is rather small. It is around 0,03 percent of the borrowed capital. The purpose with the loan was to acquire land and houses. The loan was taken over in a generational transfer so the member has not conducted any analyses of different banks and credit institutions. The member has no opinion about Landshypotek as a future commercial business.

##### *Risk attitudes*

Member 1 has long planning horizons in his/her investments which is the reason for the member's risk loving profile. The respondent believes his/her risk profile will change to be more neutral in the future. The member does not see any risk in investing capital, which will be fixed in Landshypotek during the membership. The respondent has this view because Landshypotek is a solid cooperative and is owned by its members and that contributes toward limited risk-taking. The member prioritizes the long term development of the cooperative instead of receiving as much capital as possible in a short time.

The member believes in Landshypotek's business idea because there will always be a demand for credit in the agricultural and forestry sector. The respondent believes there is less risk in investing in Landshypotek compared to the stock market. The stock market is more complex and the value of a stock can drop. The member finds it safer to invest in Landshypotek, despite the fixed contributed capital. The capital will only be lost if Landshypotek experience a bankruptcy, which according to the member is unlikely. The input limit in relation to the borrowed capital reduces the risk of losing too much capital. The respondent thinks the contributed capital should be paid out immediately after termination of the membership and does not see the reason for why it takes three years to receive the contributed capital. Nevertheless the member does not think it is a big issue. The member has no insight in Landshypotek's degree of risk in investments in the past but thinks that the risk profile has been restrictive because of the structure of a cooperative. The member cannot say if the intended change of contributed change will change Landshypotek's risk profile.

##### *Contributed capital*

The respondent declares that he/she will actively increase the contributed capital to the limit of four percent due to the high dividend (ten percent). The investment decision also depends

on the economical situation and the planning horizon. The member might also be interested in investing more than input limit if that capital is repaid at request. The respondent believes members who have reached the limit are those who profit from the intended change of contributed capital. The member thinks it is right that members with large contributed capital are those who profit the most because they have contributed with much capital. Those members have contributed and built up the equity in Landshypotek. Member 1 does not feel compelled to invest to not lose by the change.

#### Dividend

The respondent would demand eight percent dividend on the contributed capital. The member believes that the fixed capital is a disadvantage and therefore demands a dividend rate which is higher than the member's usual aim. A too low dividend rate would make the investment unattractive. According to the member the stock market is more risky, but it does not lead to higher dividend rate demands, because the capital in a stock market is always available. Member 1 would terminate his/her membership in Landshypotek if the dividend rate would be four percent or lower.

#### Behavior and attitudes

The member thinks that the incentives to invest in Landshypotek increases because of the intended change of contributed capital, but will not follow the cooperative more closely. The possibility to reach the input limit immediately is a good motive to invest in Landshypotek. The member thinks it is good that the dividend is prioritized at the expense of patronage refund. This leads to a more explicit connection between the contributed capital and the dividend.

The intended change of contributed capital will not make the respondent interested in terminating his/her membership. The member declares that he/she would consider terminating the membership if the change implies a general deterioration for the members compared to old model. Less favorable conditions would be acceptable for a short period of time, but it would be unacceptable if no improvement occurs. The respondent prefers the new model because of the possibility to make a direct investment in order to reach the input limit.

Member 1 has no opinion about the impossibility to receive cash payments for dividends and patronage refunds until the input limit is reached because it is such small amounts of money. The respondent thinks it is more important with a low interest rate than a high dividend on the contributed capital. It is the low interest which makes the cooperative attractive and the loan conditions is the reason for the membership. According to the respondent the "member loan" is a good opportunity to reach the input limit, but member 1 would probably not use it. The member finds it problematic that the board of directors is able to adjust the input limit, but if the board does explain why they have to change the limit it would be acceptable.

#### Ownership

Member 1 believes a cooperative should have one member one vote. The respondent thinks it would be wrong if members with large contributed capital have more votes. The member's incentives to invest will not increase with vote rights proportional to the size of contributed capital.

#### Concluding remarks

The member's overall perception of the intended change of contributed capital is positive, a four on a five-point scale.

#### 4.1.2 Member 2

##### Description of member 2

The member owns an agricultural and forest property and practice crop farming. The respondent is between 40 and 59 years old and has been a member for ten years and will be a member until retirement i.e. in approximately 20 years. He/she has chosen Landshypotek because of the cooperatives specialization in agricultural business, low interest rates and good contact with the employees. The member's loan is around 1 million SEK and the contributed capital amounts to 1,4 percent of the borrowed capital. The loan has been used to finance a generational transfer. The respondent believes in Landshypotek as a future commercial business.

##### Risk attitudes

The respondent is risk-averse and does not believe his/her risk profile will change during the expected period as a member. Member 2 finds it less risky to invest capital in Landshypotek, even though the capital is fixed in Landshypotek compared to investing in the stock market. The member thinks it is a disadvantage, due to inflexibility, that the invested capital in Landshypotek is fixed during the membership. He/she finds it problematic that it takes three years after terminated membership to receive the contributed capital.

##### Contributed capital

The member would invest if the intended change implies disadvantages without investing in Landshypotek. The respondent declares that he/she would invest approximately two percent of the borrowed capital, but it depends on the economic situation. Member 2 is not interested in investing more than the input limit. The respondent believes that members with large contributed capital are those members who will benefit the most from the new model, but find it reasonable because those who contribute should profit the most. The intended change of contributed capital does not make the member feel compelled to invest not to lose due to the change.

##### Dividend

The respondent believes ten percent is a reasonable dividend rate on the contributed capital. He/she would demand a higher dividend rate on contributed capital in Landshypotek compared to the stock market because of the fixed capital in Landshypotek. Member 2 declares that he/she would terminate the membership if the dividend rate falls to two percent.

##### Behavior and attitudes

The respondent's reason to be a member in Landshypotek does not change if the intended change is implemented. The member will instead be more active and follow the cooperative more closely. The member's incentive to invest in Landshypotek does not increase with the new model, even though the respondent perceives a more clear connection between dividends and contributed capital. Member 2 thinks it is unfavorable that the dividend is prioritized at the expense of the patronage refund, but the new model does not imply that the member would terminate the membership in Landshypotek. It is only the loan conditions that affect the choice of credit institution.

The respondent would rather keep the old model, but finds it acceptable that dividends and patronage refunds are capitalized until the input limit is reached because it is good to build up the own contributed capital. The member rather prefers a low interest rate instead of high dividend rate because the member wants to keep the interests cost as low as possible. The

member chooses bank after the interest rate. The respondent will not use the "member loan", but finds it as a good possibility to finance the contributed capital. Member 2 does not like the proposal that the board has the opportunity to adjust the input limit because of uncertainty.

#### Ownership

Member 2 thinks one member should have one vote. Even if the voting rights were proportional to the contributed capital this would not affect the member's willingness to invest capital in Landshypotek.

#### Concluding remarks

The member's overall perception of the intended change of contributed capital is slightly negative, a two on a five-point scale.

### 4.1.3 Member 3

#### Description of member 3

The member owns an agricultural and forest property and practice crop and ley production as well as beef cattle production and contract work (e.g. snow clearing). The respondent is between 40 and 59 years old, has been a member for 30 years and will be a member until retirement i.e. approximately 15-20 years. The member is also an "elected representative" in Landshypotek. Due to the generational change the respondent became a member in Landshypotek, because the first mortgage loan was already available in Landshypotek. The borrowed capital amounts to 1 million SEK and the contributed capital amounts to 3,3 percent of the borrowed capital. The loan was taken to acquire additional land. The member believes that in the future, Landshypotek will only deliver a result in line with market due to some uncertainty. The member feels unsecure because Landshypotek lost some market shares a couple of years ago. Nevertheless, the cooperative has delivered good results and regained the members' trust of a better future. Member 3 thinks other banks may be a threat if they can offer entire solutions and not just low interest's rates.

#### Risk attitudes

The member is risk-averse in the agricultural business, but in private business the member is a risk-lover. The agricultural risk profile is not expected to change during the remaining time as a member. The member would rather invest in Landshypotek than in the stock market. Firstly, the member finds the risk of investing capital in Landshypotek very small compared to investing in the stock market and secondly it is a good chance to profit from the investment in Landshypotek. An investment in Landshypotek gives access to the whole equity, which implies "invest 1 receive 3,5" according to member 3. The respondent believes that risk will be reduced with the new model because the board is likely to strive to reach the dividend goal of ten percent and that Landshypotek's profit will be divided over the contributed capital.

Member 3 does not see any problems with the fact that the contributed capital will be fixed during the whole membership. The capital will be there, but it is a disadvantage that it takes three years to receive the contributed capital after terminated membership. The respondent understands the necessities for Landshypotek to have to time adjust, but this makes it harder to change credit institution. The member perceives Landshypotek has strong collateral within land and forest, which leads to low risk. According to member 3 the cooperative needs more equity to reach the expansion goals and more capital implies safety for Landshypotek. This makes it easier to meet the market demand and lower the risk slightly.

One problem which has to be minimized is the risks of dilution i.e. the members' individual capital (contributed capital) must not be too big in relation to collectively own capital (non-restricted capital). A distorted relation would lead to lower dividends. The new model might be risky if many members reject the new model and chose not to invest because of lack of knowledge or have negative approach to the concept "contributed capital".

#### Contributed capital

Member 3 would happily invest to reach the input limit because it is a good investment (invest 1 receive 3,5) and there is a substantial probability that the dividend goal of ten percent will be reached. The respondent would like to invest more than the input limit if possible, in such case he/she would invest ten percent of the borrowed capital. According to member 3 new members or members with little contributed capital would profit the most from the new model because they are able to invest to reach the input limit immediately. The member also adds that members with large contributed capital will benefit more from the change than those members with little contributed capital and those who do not invest. The respondent states that the dividend should be proportional which implies that members with large contributed capital should receive a large dividend. According to the member this new model would be a success factor and the free-rider problem would be eliminated. Member 3 does not feel compelled to invest not to lose due to the change. The investment decision depends of the economic situation. There might be other investments which are more urgent and of more importance.

#### Dividend

Member 3 has no personal dividend goal, but it would be really bad if the contributed capital does not yield anything at all. The respondent would demand a higher dividend on invested capital in the stock market than in Landshypotek due to a higher risk. If the dividend would fall to four percent in combination with bad loan conditions the member would change to another credit institution. According to member 3 a dividend of six percent and good loan conditions are good enough.

#### Behavior and attitudes

The respondent's reason to be a member in Landshypotek does not change because of the new model and the member is already very active as a member. According to the member, his/her incentives to invest in Landshypotek will increase and there will be a more clear connection between dividend and contributed capital, given that most of the members invest. One problem could be that many members reject the new model and do not invest. This leads to a few members contributing which is not the purpose with the new model. In such a case of few investing members it might be an idea to find another model, but that might lead to that a model which makes it possible for external investors to profit the most from the cooperative. Member 3 does not find any problems with the dividend being prioritized at the expense of the patronage refund. This will not be an issue if many members choose to invest, they will in that case receive dividend instead of patronage refund. The new model could imply problems for the members who do not realize the advantage to invest in the cooperative.

The respondent would not terminate his/her membership in Landshypotek because of the intended change of contributed capital. The only reasons to terminate the membership are if the member sells the farm or if the member no longer is an "elected representative" and another bank offers better loan conditions. The member would also terminate the membership if the dividend would become too low and if Landshypotek performs really poor which leads to higher interest's rates.

Member 3 finds the old model reasonable, but it does not generate enough equity. The new model would be better for Landshypotek if most of the members invest. The capital structure would be improved if the contributed capital is divided over many members and most of the members will be satisfied. It will be an advantage for Landshypotek if many members are satisfied. The member really likes the fact that patronage refunds and dividends are capitalized until the input limit is reached. All companies need equity and a cooperative has no possibility to issue shares. The member is not satisfied with the fact that the cooperative keeps parts of the business surplus as collective capital. It is preferred if the capital remains in the cooperative as individual capital. The member understands that the capital base has to grow and if the change is good for Landshypotek it is good for the members.

The respondent thinks it is best if Landshypotek determines the interest rate based on the market conditions, which leads to higher dividend. The dividend is a better measure because it indicates how good Landshypotek performs. Member 3 believes that the "member loan" is a good opportunity and would use it if needed. Furthermore, the member thinks that the "member loan" is a necessary condition for as many of the members as possible to be interested in investing. The member regards it as necessary that the board has the possibility to adjust the input limit to adjust the model after rules and demand of capital.

#### Ownership

The respondent does not think members with a large contributed capital should have additional voting rights than members with little contributed capital. It would be necessary with proportional voting rights if many members become active and vote for their own best instead of the cooperative's best. It may lead to wrong decisions if the members vote for their own best. The "elected representatives" should receive voting rights, at national level, based on a combination of the region's members and their share of the borrowed capital. The respondent's incentives to invest would not increase with proportional voting rights.

#### Concluding remarks

The member's overall perception of the intended change of contributed capital is positive, a four on a five-point scale. The member is very positive, but believes it will be hard to implement the model to the members because it is difficult to promise a certain dividend on contributed capital. Member 3 perceives some risk of rejecting members because they might not see the advantages with the new model or their aversion to additional loans. It might be a risk that other banks speak negatively about the intended change. Therefore it is very important that Landshypotek achieves the goals.

#### 4.1.4 Member 4

##### Description of member 4

The member owns an agricultural and forest property and practice crop farming and operate a herd of beef cows. The respondent is in the group 60 years or older and has been a member for 30 years and will be a member for an additional five years. The member did not actively choose Landshypotek as a credit institution because the loan was already taken in Landshypotek when member 4 bought the farm from his/her parents. The loan is approximately 1 million SEK and has been used to finance the farm, buy additional land and for machinery investments. The member's contributed capital amounts to 1,3 percent of the borrowed capital. The member has a very good confidence in Landshypotek as a future commercial business.

### Risk attitudes

The member is risk-averse and does not believe the risk profile will change during the remaining time period as a member. The member perceives the risk of investing capital in Landshypotek as very small compared to investments in the stock market because Landshypotek is a solid company with little customer and credit losses. The agricultural sector feels very secure. If the value of the agricultural properties would fall everything else would also fall. Member 4 finds it acceptable that the capital is fixed in Landshypotek during the entire membership because it is the way a cooperative works and there is not a problem due to the small amount of capital. The capital is something extra for the retirement. The respondent desires a faster payback time than three years, but finds it agreeable because those are the rules. The member believes Landshypotek is a cooperative that historically has taken small risks. The fact that the cooperative has survived 175 years is proof of stability and the intended change of contributed capital does not change Landshypotek's risk profile.

### Contributed capital

Member 4 would invest to reach the input limit if the new model is introduced. The new model increases the member's incentives to invest because of the high dividend. The member will probably not invest above the input limit. This decision depends on the liquidity situation. The respondent would invest 50 000 SEK over input limit if there is a high dividend. Member 4 perceives that no member profit more than any other member in the new model because the calculations are based on percent. The respondent perceives no problem if members with large contributed capital profit more because they contribute with more capital. The member does not feel compelled to invest not to lose due to the change.

### Dividend

The member believes ten percent as dividend is a good ambition. The respondent would demand a higher dividend from investments in the stock market due to the greater risk. If Landshypotek's dividend would be zero percent two years in a row combined with poor results for Landshypotek, the member would terminate his/her membership.

### Behavior and attitudes

The respondent's reason to be a member is not affected by the intended change, but his/her incentives to invest increases. The member will not be more active because he/she is already quite active and follows the cooperative closely. Member 4 believes it will be a more distinct connection between invested capital and dividend. The member would not end his/her membership because of the intended change of contributed capital, but if Landshypotek would perform poorly the member would terminate the membership. The member prefers the new model before the old model, but he/she would rather prefer a low interest rate instead of high dividend because the interest rate affects the total paid interest. The respondent is positive towards the fact that all dividends and patronage refunds are capitalized until the input limit is reached. The respondent would maybe use the "member loan" to reach the input limit. Member 4 does not see any problems that the board is able to adjust the input limit, after the demand of capital, as long as the board makes advance warning of a future change of the input limit.

### Ownership

The respondent believes that members with large contributed capital should not have more votes than members with little contributed capital, but the member would invest more if the

voting right was proportional to the size of the contributed capital. Member 4 would in that case invest a moderate amount of capital.

#### Concluding remarks

The member's overall perception of the intended change of contributed capital is positive (four on a five-point scale).

#### 4.1.5 Member 5

##### Description of member 5

Member 5 owns agricultural and forestry land and the main focus is crop production, but there are also some forestry operation and rental business. The member is between 20-39 years old and has been a member in Landshypotek for eight years. Member 5 declares that his/her intention is to remain as a member in Landshypotek until retirement. The member has chosen Landshypotek because of the loan terms and Landshypotek's focus on farmland as security for mortgage loans. Member one's loan is around 5 million SEK and the purpose of the loan was to acquire the farm and to purchase nearby land. The member believes that in the future, Landshypotek will deliver a result in accordance to the market.

##### Risk attitudes

The member has a neutral risk profile and does not think that it will change during his/her time left as a member in Landshypotek. The respondent believes that the risk of investing in Landshypotek is lower than investing in the stock market because he/she feels more comfortable with a cooperative like Landshypotek and because there is a very small risk of actually losing capital invested in Landshypotek. The member believes that Landshypotek is a cooperative that historically has taken small risks and also that the intended change of contributed capital is not going to affect the company's risk profile. The member adds that there is greater risk of losing capital on the stock market but that the stock market also can provide higher return on invested capital. The respondent sees no problem with the invested capital being fixed throughout the whole term of the membership, but feels that three years after terminated membership is an unnecessary long time to wait for the contributed capital to be paid out. The member would like to receive the contributed capital as soon as possible after terminated membership.

##### Contributed capital

The Member's contributed capital is today around two percent of the borrowed capital. He/she declares that if the change of contributed capital is implemented he/she will not actively invest the intermediate capital needed to reach the input limit of four percent of the borrowed capital. The reason is that the member feels that the capital is needed elsewhere for example to purchase machinery and cover maintenance. According to the member the only reason to actively invest capital in Landshypotek would be an incredibly high dividend on contributed capital. The respondent believes that members with large contributed capital will gain the most from the intended change but also adds that this has no relevance to the respondent who also does not feel compelled to invest to not lose by the change.

##### Dividend

Member 5 believes that Landshypotek might have a problem in maintaining a ten percent dividend on contributed capital and adds that a dividend around seven to eight percent is more reasonable. When the respondent compares the contributed capital in Landshypotek to capital invested in the stock market he/she declares that he/she would demand a higher return on

capital invested on the stock market because there is a higher risk of losing capital. The respondent feels that the service, discussion and availability that Landshypotek can offer are more important than high dividend on contributed capital. The member therefore feels that if Landshypotek would fail to deliver ten percent dividend on contributed capital and only for example deliver two percent, it would not matter as long as it only happens once. But if the dividend was two percent for several years consecution the respondent would consider the decision to terminate his/her business relationship with Landshypotek.

#### Behavior and attitudes

The respondent does not feel that the intended change of contributed capital will affect his/her reason for being a member in Landshypotek. According to the member the main reason for the membership is still the whole package that Landshypotek can offer. The member will not follow developments in Landshypotek more accurate and adds that the incentive to invest in Landshypotek does not change as a result of the intended change of contributed capital. However, the member believes that the intended change will lead to a clearer link between the contributed capital and dividend compared too previously and sees no problem with the fact that the dividend is prioritized at the expense of the patronage refund. Member 5 will not terminate his/her membership in Landshypotek because of the intended change of contributed capital, but if the interest rate were to rise to a much higher level than other credit institutions and banks the member would consider a redemption of the loans in Landshypotek.

Member 5 believes that the intended change of contributed capital constitutes a better model than before. The main reason is that the input limit is reduced from eight to four percent which makes it easier to reach the input limit and get the patronage refund and dividend paid out. The member sees no problem with the fact that the patronage refunds and dividends are capitalized on the equity account until the contributed capital reaches the input limit, as long as the input limit is four percent of the borrowed capital. When the member is asked to compare the importance of a low interest rate and a high dividend the member answers that a low interest on borrowed capital is much more important than high dividend on contributed capital. The reason is that the member perceives the low interest rates as one of the main reasons for choosing Landshypotek as credit institution.

The respondent will not use the "member loan" to reach the input limit and he/she is positive towards the possibility for the board of directors to change the input limit as long as it leads to a lower input limit. Otherwise he/she would like the input limit to be fixed at four percent.

#### Ownership

The respondent believes that members with large contributed capital should have more votes than members with little contributed capital. However, a voting right proportional to the size of the contributed capital would not affect the member's will to invest capital in Landshypotek.

#### Concluding remarks

The member's overall perception of the intended change of contributed capital is positive, a four on a five-point scale.

#### 4.1.6 Member 6

##### Description of member 6

Member 6 owns agricultural and forestry land and the main focus is crop production, but there are also some rental business. The respondent became a member in Landshypotek three years ago when he/she took two loans. The duration of the two loans are three and four years and the member states that he/she will continue to be a member for two more years and then review all possible options. Member 6 is 40-59 years old and has a loan in Landshypotek which amounts to nearly 5 million, the member's contributed capital amounts to 0,12 percent of the borrowed capital. The purpose of the loan was to acquire the farm property that he/she owns today. The respondent is a member in Landshypotek because it was the institution that gave the best loan terms at the time of the loan and states that it primarily was the low interest rate that determined the choice of credit institution. Member 6 considers Landshypotek to be a well managed company that has followed the development on the market and the respondent continues to have a good faith in Landshypotek as a profit-making enterprise. The member thinks that Landshypotek wants to implement the change of contributed capital because of changes in capital adequacy rules and to make themselves more attractive on the market.

##### Risk attitudes

Member 6 considers himself/herself to have a very high risk profile. The member believes that the willingness to take risks in general decreases with age, and therefore believes that his/her own propensity to take risks will decrease in the future. In comparison with investing capital on the stock market, the respondent sees it as a very small risk of tying up capital in Landshypotek. The reason is that the member thinks that Landshypotek is a company that historically has taken small risks. The member also believes that the intended change of the contributed capital will not change Landshypotek's risk profile. Furthermore, member 6 argues that there are more parameters that affect investments on the stock market and indicates the general economy as well as the individual company as stress factors. By this, the member implies that there are additional parameters in the stock market that may affect the return on capital negatively than there are in Landshypotek. However the potential yield is greater in the stock market. The member is negative towards the fact that the contributed capital is fixed throughout the term of membership because it limits the possibility to use the capital for alternative investments. The member is also negative towards the fact that the contributed capital is repaid first three years after termination of the membership, but adds that he/she understands that Landshypotek must have certain rigidity in the contributed capital to maintain control over the equity.

##### Contributed capital

Member 6 believes that the intended change of contributed capital clearly is an attractive model if the goal of ten percent dividend is achieved. The member considers himself/herself not to have enough liquid assets at the time to actively contribute with capital in Landshypotek. The member will therefore most likely not contribute actively with capital in Landshypotek if the intended change is implemented, but adds that if his own situation changes, he/she is willing to actively contribute with capital up to and including the input limit. The member also adds that in that situation he/she would also be willing to contribute with more than the input limit and says that he/she would be willing to actively contribute with ten percent of the borrowed capital granted that he/she received ten percent dividend on the contributed capital. Member 6 believes that members with large contributed capital will benefit most from the change and also states that he/she thinks this is right because he/she believes that members who contribute with a large amount of capital also should be rewarded.

Furthermore, the member adds that he/she does not feel compelled to contribute with more capital in order not to lose by change and states that it is not the dividend that determines the choice of investment but his/her own liquidity and access to alternative investments.

#### Dividend

Member 6 states that he/she would demand at least seven percent dividend on contributed capital if the intended change was implemented. The demand is based on the member's required rate of return in investment situations. The respondent requires a lower dividend on contributed capital in Landshypotek compared to invested capital in the stock market because he/she feels that there is a greater risk of investing in the stock market. The member states that the dividend on contributed capital does not affect the decision to be a member in Landshypotek or not and adds that the interest rate is the most important factor in the decision of credit institution.

#### Behavior and attitudes

The member declares that the intended change of contributed capital might change his/her reason for being a member in Landshypotek depending on the member's situation after the implementation. The respondent also believes the intended change will make him/her follow Landshypotek more thoroughly. The member's motives for investing in Landshypotek will increase if the intended change is implemented but the member adds that his/her motives for investing is highly connected to the goal of ten percent dividend. The member therefore believes that it is very important for Landshypotek to achieve their goal and that they might lose a lot of members if they fail. The respondent also feels that the intended change will lead to a clearer link between the dividend and the contributed capital. Member 6 believes that his/her own future situation plays a major role in determining whether it is good or bad that the dividend on contributed capital is prioritized at the expense of the patronage refund.

The intended change of contributed capital will not make the respondent conclude its business with Landshypotek and the member declares that it still is the loan terms that determine the choice of credit institution. Furthermore, the member declares that a low interest rate on borrowed capital is more important than high dividend on contributed capital and states that the low interest rate was his/her main reason for choosing Landshypotek. The member is also indifferent to the fact that both patronage refunds and dividends are capitalized until the input limit is reached. The respondent views the "member loan" as an attractive possibility and states that he/she might use this possibility depending on his/her own financial situation at the time. The member is negative towards the fact that the board of directors will have the possibility to change the input limit and declares that he/she sees this need as a sign that the board of directors has not done their job in the first place.

#### Ownership

Member 6 thinks that members with large contributed capital ought to have greater voting rights because they contribute more, but also argues that a proportional voting share will not make him/her contribute with more capital in Landshypotek.

#### Concluding remarks

Member's overall perception of the intended change of contributed capital is cautiously positive, a four on a five-point scale.

#### 4.1.7 Member 7

##### Description of member 7

Member 7 owns agricultural and forestry land and the main focus is crop production and calf breeding. The respondent is in the age group 60 years or older and has been a member in Landshypotek for 30 years. The member has the intention to be a member for an additional ten years. The respondent did choose Landshypotek as his/her credit institution because of Landshypotek's loan conditions with low and predictable interests. The borrowed capital is around 5 million SEK and has been used for financing investments and working capital. The member's contributed capital amount to 4,7 percent of the total borrowed capital. The respondent believes in Landshypotek as a future commercial business.

##### Risk attitudes

Member 7 perceives himself/herself as risk neutral and does not believe that the risk profile is likely change during the remaining time of the membership in Landshypotek. The member believes it constitutes a greater risk of investing in the stock market than investing in Landshypotek because the cooperative's solid financial situation and no risk of losing the contributed capital. Member 7 thinks it is okay that the contributed capital is fixed during the membership, because that is how the operation works. However it would be a problem if the dividend rate would be too low. The respondent also accepts that the contributed capital is paid out three years after termination of the membership because he/she understands that Landshypotek needs stability. The member finds it problematic that not all equity is redistributed to the members. According to the respondent, Landshypotek has taken small risks in the past except a few large "crashes". Member 7 believes the new model would lower Landshypotek's risk profile because more capital is fixed in the cooperative.

##### Contributed capital

The member would increase his/her contributed capital as much as possible if the dividend rate is ten percent. If the dividend rate on the amount of capital that exceeds the input limit would be five percent or less the respondent would not invest more than the input limit. Member 7 believes that members with a large contributed capital are those who will benefit the most of the intended change and does also believe all members will invest to reach the input limit. The respondent finds it better if all equity is paid out to the members and that Landshypotek should practice cost-effectiveness so their interest rate becomes as low as possible. The ownership should be connected to the whole company and that is why it is good with fixed contributed capital so the members cannot get their capital paid out until they terminate the membership.

##### Dividend

The respondent does not think that the dividend is the most important issue and which model Landshypotek uses is of less interest. It is better if as much as possible is paid back to the members. The member would compare his/her dividend goal with treasury bonds i.e. 4,5 percent because of the safety in investments in Landshypotek. Member 7 would require a higher dividend from Landshypotek compared to the stock market because an investment in the stock market gives the opportunity to profit from a stock's increase in value. The dividend rate on the contributed capital does not affect the decision of being a member in Landshypotek. If the dividend rate is to become too low for many years the member would consider other banks. One year with low dividend rate is not a problem.

### Behavior and attitudes

The respondent's reason to be a member in Landshypotek does not change because of the new model and he/she will not be more active as a member or get bigger incentives to invest in Landshypotek. Member 7 does not think that there will be a stronger connection between contributed capital and dividend, it is only another way of receiving a refund. The member has no problem with the fact that the dividend will be prioritized before the patronage refund. The respondent will not terminate his/her membership because of the intended change, the only reason to change is if another bank offers better loan conditions. Member 7 thinks the new model is good if it implies an improvement for the cooperative.

Another positive aspect with the new model is that the input limit is lowered and that all patronage refunds and dividends are capitalized until the input limit is reached. The respondent points out that all equity, including unallocated equity, should be divided among the members as contributed capital. Member 7 makes his/her choice of credit institution mostly based on the interest rate, but the total result is also of importance. If the member invests capital in Landshypotek he/she demands a dividend.

According to member 7 the "member loan" is a good idea if the financial supervisory authority accepts the concept and the respondent would use the "member loan" if he/she needs to. The member believes that the board needs to have the power to adjust the input limit, but he/she demands a warning in advance. The member would like a higher input limit so there is room to issue bonus shares from the contributed capital.

### Ownership

Member 7 believes that members with a large amount of contributed capital should not have more votes than members with little contributed capital. A voting right, proportional to the contributed capital would not affect the member to invest more capital in Landshypotek.

### Concluding remarks

The member has not enough knowledge to judge if the intended change is positive or negative, but he/she would like to see something in between the old and the new model. The respondent is slightly positive, but ten percent is too high and contributed capital could therefore be regarded as risk capital. Member 7 believes that a too high dividend rate will "dope the capital".

The member thinks Landshypotek should maintain their strategy towards cost-effectiveness and be a cooperative offering the best loan conditions. All equity should be paid out to the members and not keep the capital and act as a foundation. A new member today gets access to the cooperative's equity which has been contributed by old members.

## 4.1.8 Member 8

### Description of member 8

Member 8 is an "elected representative" in Landshypotek and owns agricultural and forest land. The agriculture land produces ley but the farms main focus is forestry and milk production. The respondent is in the age group 40-59 years old and has been a member in Landshypotek for 33 years. The respondent declares that he/she intends to remain a member in Landshypotek for five more years before performing a generational transfer. The member's loan amounts to around 5 million SEK and the contributed capital is 3,6 percent of the borrowed capital. The purpose of the loan was to acquire the agriculture and forestry land in

an earlier generational change but also to build a livestock barn. The reason that the respondent is a member in Landshypotek is because he/she feels that they have favorable interest rates and good loan terms in general. The member also states that he/she believes that as a member in Landshypotek you receive the correct interest rate right away and not an initial low interest rate that is increased later on with the purpose to allure clients to become borrowers. Member 8 has a very high confidence in Landshypotek as a future profit-making enterprise.

#### Risk attitudes

The member considers himself/herself to be quite willing to take risks but adds that the willingness to take risks decreases with age. Member 8 thinks it is associated with little risk to invest capital in Landshypotek compared to investing capital on the stock market because agricultural and forest land provide strong securities. The member also believes there are major changes in the stock market and that it actually happens that companies go bankrupt. Member 8 views the risk that this would happen to Landshypotek as in principle non-existent. The respondent is positive towards the fact that the contributed capital is fixed throughout the term of membership and states that this is a price you have to be willing to pay to take part of the benefits that Landshypotek offers. Further, the member believes that this type of capital structure is necessary for Landshypotek and that what is good for Landshypotek is also good for him/her as a member in the end.

On the contrary, member 8 believes that it is unnecessary that the contributed capital is repaid first three years after termination of the membership and that it should be possible to obtain repayments no later than one year after completion of the membership. The member adds that this is purely a matter of principle. The member believes that Landshypotek is a company that historically has taken small risks and he/she does not believe that the intended change of contributed capital is going to affect Landshypotek's risk profile.

#### Contributed capital

Member 8 believes that the intended change of the contributed capital is a good solution given that the patronage refund and dividend goals are achieved and that Landshypotek really is in need of capital to expand its business. However, the member also adds that he/she will not actively contribute with capital if the intended change is implemented. The argument is that he/she only has the scheduled time of five years left as a member in Landshypotek and therefore finds it unnecessary to invest capital that will be redeemed in a near future. The member also feels that he/she needs to distribute the risk and is therefore not willing to invest too much capital in a single operation. However, the member indicates that a guaranteed higher dividend and patronage refund would make him/her invest more than what he/she is willing to do in the current situation. Furthermore, the respondent does not believe that Landshypotek's need of capital will grow that much due to the increased business activity will be restricted by new rules on capital adequacy and amortization. The difficulties in taking market shares from other competing credit institutions is another obstacle. He/she therefore believes that the ability to actively invest four percent of the borrowed capital is a pure hypothetical question that will not be of significance for the members.

Member 8 believes that new members with a small contributed capital abuse the system that Landshypotek has today. He/she also believes that the intended change of contributed capital will bring balance to the system because new members' need to actively contribute with capital in order to enjoy the benefits. The member therefore also believes that members with large contributed capital should get more in return and adds that if that is not the case, he/she

believes that members will invest their capital elsewhere. Member 8 also adds that if he/she did not have so little time left as a member he/she would feel compelled to actively contribute with capital, up to and including input limit, in order not to lose by the change. However, the member once again points out that he/she believes that what is good for Landshypotek also is good for him/her as a member in the end, and that he/she therefore does not view this as a problem.

#### Dividend

Member 8 believes that the dividend on contributed capital should be at least five percent and states that he/she would not demand a higher return on contributed capital in comparison to capital invested in the stock market. The reason is that the respondent believes that the more favorable loan terms cause lower yields in Landshypotek compared to the stock market. The member also believes that compared to a low interest rate the magnitude of dividends and patronage refunds are insignificant and therefore do not affect the decision to be or not be a member in Landshypotek.

#### Behavior and attitudes

The intended change of contributed capital does not imply that the member's reason for being a member in Landshypotek changes because the member feels that the change does not affect him/her in a significant way. However the respondent adds he/she understands Landshypotek's need for the intended change. The member does not think that the intended change will make him/her follow more closely what happens in Landshypotek because he/she has a confidence in the management and believe they will manage the business for the members' best. The respondent does not think that his/her own motives to invest in Landshypotek are likely to increase with the intended change of contributed capital because he/she has such a short time left as a member.

Member 8 believes that the intended change of contributed capital will lead to a stronger and more direct link between contributed capital and dividend because the dividend is linked to the contributed capital and not to the borrowed capital. He/she also believes that this link puts more pressure on Landshypotek that forces clearly defined objectives to achieve. The respondent also believes that after the intended change it will be easier for members to predict how much they will receive in the form of patronage refunds and above all dividends on contributed capital. Due to these reasons, member 8 believes that it is good that the dividend is prioritized at the expense of the patronage refund.

The intended change of contributed capital does not cause member 8 to terminate his/her membership in Landshypotek. However, the member indicates that serious errors involving large credit losses for Landshypotek could constitute grounds to terminate the membership. Member 8 states that it does not matter to him/her if Landshypotek implement the intended change or not because he/she does not believe that neither the patronage refund nor dividend will have much effect on his/her financial situation since there is such a short time left as a member. The member indicates however that he/she prefers the new model if the intended change represent an improvement for Landshypotek.

Member 8 is positive towards the fact that it is not possible to have either the patronage refunds or dividends paid out until the input limit is reached because he/she regards it as a necessity for Landshypotek to be able to build equity. The member believes that a low interest on borrowed capital is more important than high dividend on contributed capital because he/she believes that the dividend will only produce a marginal effect on the interest costs

compared to interest rate. The respondent is positive towards the possibility for the members to borrow capital to use as contributed capital in Landshypotek but adds that for his/her own part, the choice of using a “member loan” depends on how highly leveraged he/she is at the time. The member is also positive towards the fact that the board will have an option to change the input limit, because he/she believes that this is a necessity for Landshypotek to be able to adapt to the variations on the lending market.

#### Ownership

Member 8 indicates that there are reasons to consider making voting rights proportional in relation to contributed capital but he/she also believes that it would be difficult to implement this kind of change. Furthermore the member states that proportional voting would not make him/her contribute with more capital in Landshypotek because it would require a considerable investment on his part to get a significant voting right in the association.

#### Concluding remarks

Member 8 is generally very supportive of the intended change (five on a five-point scale) because he/she believes that the change will solve Landshypotek’s need of capital. The member finally adds that he/she does not believe that the intended change will to any greater extent affect him personally.

#### 4.1.9 Member 9

##### Description of member 9

Member 9 owns several properties, its tenement houses and factories but the main property is agricultural and forestry land. The main focus is forestry and grain production. Member 9 is in the age group 60 years or older and has been a member in Landshypotek for 17 years. The respondent declares that his/her intention is to remain as a member in Landshypotek for the remaining part of his/her life. The reason that the respondent chose Landshypotek is that they offer good loan terms and because he/she is investing in agricultural activities and Landshypotek is an institution that specializes in agricultural and forest land. The respondent adds that the good contact he/she has with Landshypotek and the staff who works there also affects his/her choice of credit institution. The purpose of the member’s loan is to purchase large agricultural properties. The loan is in the group 20 million or more and the contributed capital is today 0,06 percent of the borrowed capital. The member has a very good confidence in Landshypotek as a future commercial business.

##### Risk attitudes

Member 9 believes that it takes courage to do business and therefore has a fairly high risk profile. The member believes that the risk profile changes over time and considers himself/herself to have a lower risk profile today than in the past. The reason for today’s lower risk profile is that he/she prioritizes security and stability before large gains. The member adds that today’s risk profile will not be further changed in the future. The now somewhat lower risk profile is one of the reasons why the member is investing in agriculture as he/she considers it to be very low risk of investing in agriculture and forestry properties and because he/she sees a good development potential in the agricultural sector. This is also the reason why the member believes that it is a very low risk of investing capital in Landshypotek because they lend money with strong security to a large and stable customer base with relatively good repayment capacity. Member 9 also believes that Landshypotek is a cooperative that historically has taken small risks and that the intended change of contributed

capital gives Landshypotek a lower risk profile because it makes it possible to increase Landshypotek's equity.

In comparison with investing capital in the stock market the member believes that the risk is practically 100 percent larger than to commit the same capital in Landshypotek. The value of agricultural land does not fall to the same extent as capital on the stock market can do. However there are also opportunities to obtain higher returns in the stock market. According to the member this means that he/she is much more willing to take risks on the stock market than he/she ever would be willing to do in Landshypotek. The fact that the contributed capital in Landshypotek is fixed throughout the term of the membership also affects the willingness to take risks compared to the stock market where capital can be made available almost immediately, but the member adds that since it in this case is so small amounts it does not matter. The respondent also has no problem with the fact that the contributed capital is repaid first three years after the membership is completed.

#### Contributed capital

Member 9 will not actively increase his/her contributed capital if the intended change is implemented. The reason is that the respondent does not believe that there are any assurances that the dividend on contributed capital will be ten percent. Moreover, as the member adds, there are no guarantees on the stock market but, unlike the contributed capital in Landshypotek the capital on the stock market is not fixed in the same way and it is therefore possible to transfer capital if you are not satisfied with the returns. This possibility does not exist in Landshypotek and it is one of the reasons why the member is not going to increase his/her contributed capital if the intended change of contributed capital is implemented. Furthermore the member adds that if he/she was to invest capital in Landshypotek he/she would invest enough capital to reach the input limit, otherwise he/she sees no point with the investment. The member also sees it as a very positive contribution that the input limit is lowered from eight percent to four percent as it makes it easier to reach the input limit which means that you receive direct payment of patronage refund as well as dividend. The member also believes that the reduced input limit increases the incentive to contribute with more than the input limit because that capital is not fixed and can be repaid at request. Member 9 would also be willing to invest more than the input limit if Landshypotek is operated as a different form of company which offered greater influence for the owners. The member also believes that the change which allows members to actively invest capital in Landshypotek is a good model.

The respondent believes that those who benefit most from the change are members who have been members for a long time and thus built up a large contributed capital. This is something that the member is negative towards because he/she believes that Landshypotek should reward members who are actively contributing to the business by taking new loans, not passive members who are at the end of their membership and for the most part only contributes with contributed capital. However, this is something that member 9 does not want to put too much emphasis on because the contributed capital according to him/her is an insignificant amount of money.

#### Dividend

Member 9 feels that the goal of ten percent dividend is excessive and believe that this is only an explicit goal from Landshypotek to try to sell the intended change of contributed capital to their members. The respondent thinks that six percent dividend is very high, but believes that it is more reasonable. Member 9 also thinks that the dividend should be linked to an index so

that it follows the interest rates and the market in general. As an example the member mentions “Stibor” and expresses that a dividend equal to two times “Stibor” would be reasonable for Landshypotek. Furthermore, the member expresses that he/she does not like that the dividend is stated as a percentage as this is a relative measure. The respondent believes that dividend expressed in real terms would give a fairer picture of the distribution capability and be easier to understand for all members. The member does not feel that the dividend is what matters most and declares that he/she puts more emphasis on a calm and sensible development of the interest rates. The respondent is very negative towards the fact that the dividend is prioritized at the expense of the patronage refund because he/she believes that Landshypotek primarily should prioritize members with large loans. However, member 9 indicates that the dividend will not affect his willingness to be involved in Landshypotek, no matter how large or small it is.

#### *Behavior and attitudes*

Member 9 does not believe that his/her reason for being a member in Landshypotek will change due to the intended change of the contributed capital. The member declares that patronage refund and dividend on contributed capital is not the most important aspect and states that he/she appreciates the staff at Landshypotek and their willingness to help build up agricultural entities. The intended change of contributed capital does not mean that member 9 terminates his/her membership in Landshypotek, but the member feels that it is pity that the change is more inclined to promote passive owners with large contributed capital, rather than active owners with large loans and interest expenses. The intended change will neither cause the member to more closely follow what happens in Landshypotek.

Member 9 prefers the change that Landshypotek is considering relative to the model that is used today. However the respondent thinks that the patronage refund should be higher and the dividend on contributed capital should be lower. The member states that he/she would have accepted a patronage refund of at least two percent and a six percent dividend on contributed capital. Member 9 finds that a low interest rate on the borrowed capital is the most important factor and the member is therefore negative towards the fact that the patronage refunds and dividends are capitalized on the equity account until the input limit is reached. Member 9 thinks that the ability to take a “member loan” is a good solution for those who want to reach the input limit but indicates that he/she will not use the option himself/herself because he/she does not intend to actively contribute with capital. The member is positive towards the change of the statutes under which the board has the ability to change the input limit because he/she believes that the board must have this possibility in order to achieve an optimal capital base.

#### *Ownership*

In general member 9 thinks that members who have large amount of contributed capital shall have greater voting rights than members with a small capital contribution. But the member realizes that this would defeat his/her will to reward active members with large loans that do not necessarily have a large contributed capital rather than passive members with only a large capital contribution. Finally the member adds that the right to vote should be proportionate with regard to the contributed capital but that this will not increase his/her own willingness to invest because the number of members is too large.

#### *Concluding remarks*

The member's overall perception of the intended change of contributed capital is very negative (one on a five-point scale) because he/she believes that the distribution of patronage refund and dividend are all wrong. Member 9 believes that it is better for indebted borrowers

to have more than one percent refund on paid interest and that the patronage refund therefore should be increased at expense of the dividend. The member adds that he/she believes that ten percent dividend is unnecessary and all wrong and that the high dividend only is an allurement in order for Landshypotek to be able to implement the intended change of contributed capital.

#### 4.1.10 Member 10

##### Description of member 10

Member 10 is currently acquiring an agricultural and forestry land through an intergenerational transfer. The farms focus is crop, pig and forestry production and also some rental business. The member is in the age group 40-59 years old and the loans taken over by him/her through the generational change is signed for 10 to 15 years ago. The loan amounts to 20 million or more and the purpose of the loan is to finance agricultural activities and the main property.

The reason that the loan was signed in Landshypotek is that they were the credit institution that provided the lowest interest rate and best loan terms in general at the time of the loan. In connection with the generational transfer the member will examine Landshypotek's loan terms and hence, it may become necessary to terminate the membership if better terms can be achieved elsewhere. The reason that member 10 is a member in Landshypotek is that he/she assumed the loans through the generational transfer, but also because the member believes in Landshypotek in the future because they have knowledgeable staff and "elected representatives" who are well versed in agriculture and forestry.

##### Risk attitudes

Member 10 strongly disapproves risk-taking in the case of investment in property and farm business. The member also states that his/her willingness to take risks will not increase during the term of membership in Landshypotek or in the future. Member 10 considers it less risky to contribute with capital to Landshypotek compared to investing the capital in the stock market. The reason is, according to the member, that clients who borrow money from Landshypotek also are the owners and that the activities are restricted to lending to agriculture and forestry properties which the member regards as very safe assets. Member 10 perceives no risk of locking in the contributed capital during the entire term of the loan because the time horizon is short. He/she expects to implement a new generational transfer within 25 years. He/she also does not see it as a problem that the contributed capital is repaid only three years after completion of the membership because he/she is not in need of the capital urgently. The member believes that Landshypotek is a company that historically has taken small risks because they use agricultural and forestry property as collateral. Member 10 does not believe that the intended change of contributed capital will change Landshypotek's risk profile.

##### Contributed capital

Member 10 does not know if he/she will actively increase the contributed capital if the intended change is implemented. This is because the member is not able to predict his/her financial situation following after generational change and expresses that the possibility of investing capital in Landshypotek does not lie at the top of the priority list. However, the respondent indicates, that he/she thinks that the intended change is an attractive alternative given that the goal of ten percent dividend on contributed capital is achieved. Member 10 believes that the members which have a large amount of contributed capital will benefit the most from the intended change and indicates that he/she thinks it is acceptable because those

who contribute with a lot of capital should also be rewarded. But the member does not feel compelled to contribute with capital in Landshypotek in order not to lose due to the change.

#### Dividend

Member 10 considers ten percent dividend on contributed capital to very good but also states that he/she would be satisfied with five percent. The member would not seek a higher return on invested capital in Landshypotek compared to capital invested in the stock market and states that "money is money". The dividend does not affect the member's desire to be a member in Landshypotek and the member adds that he/she values other things such as a good relationship with the staff on Landshypotek.

#### Behavior and attitudes

The respondent's reason for being a member in Landshypotek is not likely to change as a result of the intended change of contributed capital. A low interest rate is still the most important factor. The member declares that he/she definitely will follow more closely what happens in Landshypotek after the implementation of the intended change. The member believes his/her motives to invest in Landshypotek increases if it is a good deal, which the member thinks it is if the dividend is ten percent. The member also believes that there will be a stronger and clearer link between members' contributed capital and dividends after the intended change of contributed capital. The respondent does not view it as a problem that the dividend is prioritized at the expense of the patronage refund because he/she believes that the change will benefit "Landshypotek AB". What is good for Landshypotek will also benefit him/her in the end.

The intended change of contributed capital does not imply that the member will terminate its membership, but he/she states that, if better loan terms are received elsewhere, he/she will terminate the membership. The respondent believes that it is good that it is not possible to obtain dividend or patronage refund until the input limit is reached because he/she believes that the purpose of a cooperative is that everyone should contribute. Member 10 thinks it is very important with a low interest rate on borrowed capital in comparison with high dividend on contributed capital since interest expenses are a significant cost in his/her own business. The member also believes that the "member loan" is a good model and states that he/she will use it himself/herself in the event of an active contribution of capital in Landshypotek. The member also accepts that the board has the ability to adjust input limit so that they can optimize their operations and thereby they might be able to further lower interest rates.

#### Ownership

The member argues that voting rights should be proportional to the volume of the contributed capital. The member also declares that he/she would not be willing to actively contribute with more capital if that was the case.

#### Concluding remarks

Member 10 indicates that he/she is generally quite positive towards the intended change of contributed capital, (four on a five-point scale).

### 4.1.11 Member 11

#### Description of member 11

The member is a part-owner in an agricultural and forest property with crop, egg and beef production and contract work (e.g. snow removal). The respondent has been a member for

eight years and an “elected representative” for five years. Member 11 is between 40 and 59 years old and will probably be a member for 15 more years. The choice of Landshypotek is partly based on the already established contact with the cooperative and partly the fact that Landshypotek did the valuation of the property when the member bought the farm. The loan is in the group 20 million or more and the contributed capital is today 0,8 percent of the borrowed capital. The loan has been used to finance the purchase of property and for investments in egg production, workshop, barn etc. The member has a strong confidence in Landshypotek as a partner in future commercial business.

### Risk attitudes

Member 11 is a risk-lover, but believes his/her risk profile will decrease over the years because it will be risky to jeopardize capital which is needed for the retirement. The respondent perceives that there is less risk of investing in Landshypotek compared to investing in the stock market because Landshypotek has focused its lending to one kind of security, Landshypotek has small credit losses and generates a good dividend. The member thinks the problem of fixed capital in Landshypotek is reduced because contributed capital in the cooperative leads to better possibilities to get good loan conditions “We help to finance ourselves”. Member 11 does not see any risks of fixed contributed capital during the membership. The capital is used as a “deposit” to be a member. The contributed capital does not feel very fixed because it is possible to receive the capital if the loans are repaid. The member declares that three years might be too long time to wait to receive the contributed capital after ending membership. However, he/she understands that Landshypotek needs the capital to maintain the equity balance for the lending. The member believes Landshypotek is a cooperative that historically has taken small risks, only a few wrong investments. Furthermore, Landshypotek has a low risk profile due to good collateral in agricultural and forest properties. The intended change might be perceived as greater risk for the members due to large amounts of capital which could frighten some members.

### Contributed capital

The member is interested in increasing the contributed capital and would invest around 1 million SEK to profit from the new model. The respondent has done calculations of how much is needed to invest not to lose due to the change. Member 11 points out the importance of the possibility of using the ”member loan” even if 75 percent leverage is reached. If the member loan’s interest is good enough the member would use the loan to reach the input limit. But the respondent is not sure if he/she would invest more than the input limit. In that case the interest and the dividend are the most important issues. The same dividend would be positive.

The member believes that good dividend and ”member loan” conditions would motivate further investments in Landshypotek. The respondent perceives that members with large contributed capital benefit the most due to the change because they receive larger dividends as well as older members who already have reached the input limit. It is acceptable that they benefit the most according to member 11 because they contribute with the most capital and take risks. The new model would lead to an improvement for all members because Landshypotek improves the capital base and structure which implies better loan conditions for the members. To offer good loan conditions contributed capital is needed. But it is not advisable to allow invested capital in excess of the input limit for speculation. Member 11 does not feel compelled to invest not to lose due to the change.

### Dividend

The member has no specific dividend goal but states that ten percent is okay. The investments on the farm might not generate ten percent, but the investments lead to an increase in the market value of the farm. The respondent would require the same dividend on invested capital in the stock market as in Landshypotek. A low dividend for only one year would not be a problem, but low dividend for many years without an improvement would be very negative. If the dividend would fall below six-eight percent the member would consider changing credit institution and to compare loan conditions. The average dividend is the most important. According to the member the dividend is level very important because he/she will use the "member loan".

### Behavior and attitudes

The respondent's reason to be a member is not affected by the intended change of contributed capital, but the incentives to invest in Landshypotek increases. The member's rationale to be a member is the loan opportunities for financing the current operation and expansion. The member is already very active in the cooperation and will continue to follow Landshypotek closely. Member 11 declares that the connection between dividend and contributed capital will become clearer. In the old model the interest rate was the main issue. The respondent believes the new model might frighten some members because of the large amount of capital required and members have to understand additional questions and take more decisions. On the other hand more decisions could lead to more involved members. The respondent finds it reasonable that the dividend is prioritized at the expense of the patronage refund. It is fair that members who contribute a lot should profit the most. The member desires that Landshypotek is able to set the "right interest rate" which leads to a good dividend and a very low or no patronage refund at all.

The intended change does not cause the respondent to terminate his/her membership. The factors that would affect such decision would be bad loan conditions or if the member sells the farm. Member 11 believes the new model is necessary to reach the needed capital base for the cooperative's expansion. The new model implies that members contribute in relation to their borrowed capital. It might be a risk if many members do not invest because the relation between non-restricted and restricted capital would be distorted. On the other hand it could be a risk if too many choose to invest. This problem could be solved by adjusting the input limit. The respondent agrees with the approach where all dividends and patronage refunds are capitalized until the input limit is reached. The capital remains within the cooperative does not affect the member's liquidity too much. Member 11 thinks a low interest rate is much more important than a high dividend.

The "member loan" is necessary for the members to invest in the cooperative. It is important that the members are able to use the "member loan" even if the first mortgage loan is fully used. The member regards it as a good idea that the board is able to adjust the input limit to maintain the right balance between non-restricted and restricted capital. That relation affects the cooperative's rating. This opportunity gives the board the possibility to influence the result and the dividend.

### Ownership

Member 11 does not think that members who have large contributed capital ought to be given additional votes than members with a small capital contribution because it is a cooperative. One member one vote is important and the democracy is fundamental. The respondent would

not invest to gain more voting rights. Member 11 does not feel any need to gain more votes because it is a cooperative.

#### Concluding remarks

The member is very positive to the intended change (five on a five-point scale), but believes it is very important to make the model easy to understand and show how the change affects the members. According to the respondent it is also very important that the dividend goals are reached the first years as a proof of Landshypotek's credibility. If the member loan's interest rate increases the dividend level has to increase. These two parameters have to harmonize.

#### 4.1.12 Member 12

##### Description of member 12

Member 12 owns an agricultural and forest farm where the main focus is grain production. The member is in the age group 20-39 years old and has a loan that amounts to 20 million SEK or more. The member's contributed capital amounts to 0,19 percent of the borrowed capital. The purpose of the loan was to acquire the property through a generational change, but there have also been some investments in the property. The respondent has been a member in Landshypotek for 7 years and intends to continue to be a member as long as Landshypotek offers favorable loan terms. The reason that member 12 is a member in Landshypotek is that previous generations have had their loans there and because he/she believes that they are competitive with their advantageous client offerings. The member also states he/she has a very high confidence in Landshypotek as a future profit-making enterprise.

##### Risk attitudes

Member 12 considers himself/herself to be quite risk willing in general but states that when it comes to the farm he/she is very reluctant to take risks. Further on the member declares that the willingness to take risk is linked to his/her own financial situation and the specific investment or situation and adds that if he/she was not so highly leveraged, he/she would be more inclined to take risks. But the member is not reluctant to borrow capital as long as the proceeds that the loan generates are larger than the cost of the borrowed capital. The respondent also believes that his/her willingness to take risks might increase in the future.

Member 12 considers it to be a low risk of investing capital in Landshypotek compared to the stock market but views it to very negative that the contributed capital in Landshypotek is fixed throughout the term of membership. This is because he/she believes that it constitutes a risk when you do not have free access to the capital. The member is also negative towards the fact that the contributed capital is repaid three years after completion of the membership and states that it should be possible to receive the contributed capital upon termination of the membership or one year later at the most. He/she believes that the completion of membership should imply a mutual termination of the business and not enable Landshypotek to withhold the member's assets.

The member believes that Landshypotek is a cooperative that historically has taken small risks. Member 12 believes that the intended change of contributed capital will increase Landshypotek's risk profile because they now have to achieve a goal of ten percent dividend. He sees it as a risk that Landshypotek might attract lot of "bad will" if they fail to achieve the dividend goal and further believes that it might cause many members to seek out some alternative credit institution.

### Contributed capital

Member 12 is in favor of contributing actively with contributed capital, provided that Landshypotek can guarantee a dividend of ten percent. In that case the member would be willing to provide capital corresponding to the input limit of 4 percent of the borrowed capital. Member 12 thinks it is interesting to invest 4 percent because then both dividends and patronage refund are paid out directly. The respondent is however in the current situation not interested in investing more than 4 percent of the borrowed capital but adds that it also depends on how the outcome of the dividend. If the dividend was to be very high, he/she would be willing to invest more than the input limit.

The member is negative towards the intended change of contributed capital if Landshypotek cannot guarantee a ten percent dividend. This is because he/she considers it a big enough risk that the capital is fixed during the entire term of membership and therefore believes that he/she should be well paid for such an undertaking. Member 12 compares with Brummer equity funds that have had an average yield of 8-10 percent over the past ten years and argues that these investments can be made available in principle immediately without having to cancel a membership or wait another year before he/she can get access to the capital.

Member 12 believes that the intended change of contributed capital implies equal benefits to all members regardless of their former contributed capital, but adds that he/she thinks it is a compelling system because he/she believes that members who do not choose to actively fill up their contributed capital to the input limit may be worse off than before. The member states that he/she feels obligated to actively contribute with capital in order not to lose by the intended change. Further, the respondent argues that members with large loans have the possibility to invest more and thereby get access to more of the surplus. However, the member adds that these members also are more stressed in terms of interest costs and thereby contribute to Landshypotek's operation to a larger extent than members with small loans.

### Dividend

Member 12 believes that a return on invested capital equal to the net between Landshypotek's deposit rate and lending rate is a reasonable dividend on contributed capital. The respondent believes such this arrangement gives a more clear and easy to understand picture of how the dividend is determined and that this would lead to more members becoming interested in the intended change of contributed capital.

Member 12 believes that there is a greater risk of investing capital in the stock market compared to contributing with capital in Landshypotek and he/she would therefore seek a higher return on capital invested in the stock market. The respondent also states that the fact that the capital is fixed during the entire term of membership leads to that he/she demands a higher return on the invested capital than he/she would if he/she had free access to the capital.

The member might consider terminating the business relationship if Landshypotek fails to achieve the goal of ten percent dividend on contributed capital. The reason is that he/she believes that if you promise ten percent dividend then you should also keep it. Member 12 emphasizes that it is very important that Landshypotek is able to achieve the dividend goal, otherwise it will create huge "bad will" among the members and lead to a permanent damage to Landshypotek's reputation. The respondent therefore believes that it is better to promise a lower dividend such as nine percent and then deliver above expectations

### Behavior and attitudes

Member 12 does not believe that the intended change of contributed capital will change his motives for being a member in Landshypotek. The loan terms still determine the choice of credit institute. The member has a long term perspective and is only interested in what the total cost of the capital is in the end. He/she will therefore calculate what the difference will be for him/her in comparison with the current situation and then make a decision to remain as member or not based on what other lending institutions offer.

Member 12 indicates that if he/she continues the membership, he/she will control that he/she receives the dividend that Landshypotek promise but otherwise the member will not follow what happens in Landshypotek more closely. The member also believes that his/her motive to invest in Landshypotek increases because the respondent feels obligated to actively provide contributed capital in order not to lose in comparison with the old model. The member believes, however, that the intended change implies a clearer link between the contributed capital and what you get in dividend and sees no problem with the fact that the dividend is prioritized at the expense of the patronage refund.

Member 12 is not negative towards the intended change in general but finds it difficult to assess which model is advantageous because it crucially depends on if Landshypotek is able to achieve their dividend goal. The member does also not consider a low interest rate on borrowed capital to be more important than a high dividend on contributed capital. The respondent indicates that the most important aspect is that the cumulative effect of the interest expenses and dividends are as favorable as possible.

Member 12 believes that the “member loan” is a good solution as long as it does not affect the member’s ability to take first mortgages loans in Landshypotek. The member also states that there is a possibility that he/she would be willing to use the “member loan” in order to reach the input limit on the equity account. The respondent is however very negative towards the fact that the board will have the possibility to change the input limit if necessary. He/she feels that the criteria / rules for an investment should be equal throughout the investment period, otherwise the investment is not that attractive.

### Ownership

Member 12 believes that members with large contributed capital should have more votes than members with little contributed capital. The reason for this is that the respondent believes that members with large contributed capital are more interested in what happens to the contributed capital and therefore have more knowledge than members with little contributed capital. If the voting rights were proportional in relation to the contributed capital, this would act as an incentive for member 12 to actively contribute with more contributed capital

### Concluding remarks

Member 12 believes that there are both positive and negative aspects of the intended change of contributed capital (three on a five point scale). Positive is that it increases the pressure on Landshypotek and the board to produce good results in order to achieve the dividend goal. The downside is that he/she sees it as a compulsion to actively contribute with capital in order not to lose in comparison with the old model.

#### 4.1.13 Summary of interviews

In this chapter the results from the interviews are summarized in relation to the hypotheses as shown in table 5 and 6. The members' attitudes towards Landshypotek's future, the risk of investing capital, capitalization of patronage refunds and dividends, level of interest and dividend, minimum required dividend and overall perception of the intended change are also presented in form of pie charts. The member's attitudes are measured on a scale from one to five.

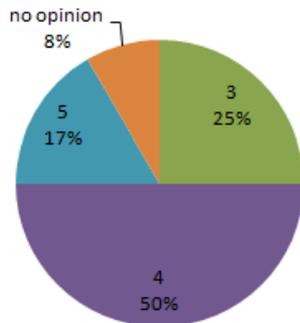


Figure 20. Members' confidence in Landshypotek as a future profit making enterprise, on a scale from one to five where 1 = very bad, 5 = very good. Source own arrangement

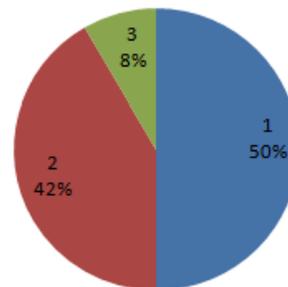


Figure 21. Members' attitudes towards the risk of investing capital in Landshypotek compared to the stock market, on a scale from one to five where 1 = low risk, 5 = high risk. Source own arrangement

As revealed in figure 20 the majority of the members have a high confidence in the business and Landshypotek's ability to be profit making in the future. Almost 70 percent of the interviewed members have a high or very high confidence in Landshypotek and 25 percent believe that Landshypotek will perform around average. Eight percent of the interviewed members did not have an opinion regarding Landshypotek's future profit potential. Figure 21 shows that more than 90 percent of the interviewed members believe that the risk of investing capital in Landshypotek is lower compared to investing capital in the stock market. Notably only 8 percent of the members are indifferent between Landshypotek and the stock market.

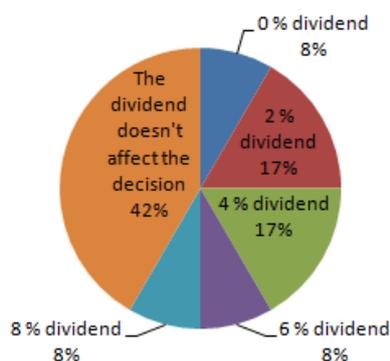


Figure 22. The dividend rate at which the members will consider to terminate their membership. Source own arrangement

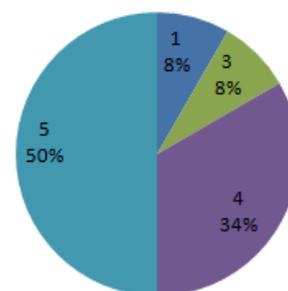


Figure 23. Members' attitudes towards the importance of a low interest rate on borrowed capital compared to high dividend on contributed capital, on a scale from one to five where 1 = prefers high dividend, 5 = prefers low interest. Source own arrangement

Figure 22 illustrates different dividend rates at which the members will consider to terminate their membership in Landshypotek. 42 percent of the interviewed members state that even if

Landshypotek fails to deliver the goal of ten percent dividend on contributed capital, this will not affect the members' decision to be a member in Landshypotek or not. If Landshypotek only achieves four percent dividend, 17 percent of the interviewed members will consider terminating the membership. The same thing happens if a two percent dividend on contributed capital is reached. For each dividend rates eight, six and zero percent, eight percent of the members will also consider terminating their dealings with Landshypotek. According to 84 percent of the interviewed members, a low interest rate on borrowed capital is much more important than a high dividend on contributed capital as shown in figure 23. Only eight percent prefer a high dividend to a low interest rate and eight percent of the members are indifferent between low interest rate and high dividend.

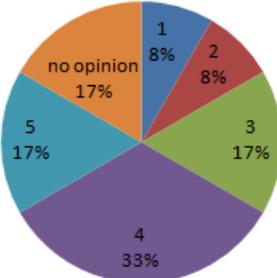


Figure 24. The members' attitudes towards the fact that it is not possible to receive neither patronage refund or dividend until the proceeds on the equity account has reached the input limit, on a scale from one to five where 1 = very negative, 5 = very positive. Source own arrangement

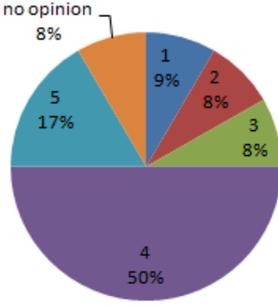


Figure 25. Members' overall perception of Landshypotek's intended change of contributed capital, on a scale from one to five where 1 = very negative, 5 = very positive. Source own arrangement

Figure 24 shows that half of the interviewed members are very positive or positive towards the fact that it is not possible to receive direct cash payments of neither patronage refunds nor dividends until the contributed capital has reached the input limit. Only 16 percent are very negative or negative towards this limitation and 17 percent are indifferent towards receiving direct payouts of patronage refunds and dividends or waiting until the input limit is reached. Eight percent of the members do not have an opinion. Figure 25 illustrates the interviewed members overall attitudes towards Landshypotek's intended change of contributed capital. As shown in the figure 25. The majority of the interviewed members are overall positive, only nine percent expresses strong negative attitudes towards the intended change and eight percent are slightly negative. Eight percent are indifferent towards the intended change of contributed capital and an additional eight percent states that they do not have sufficient information to form an opinion in this matter.

Table 5. Summary of the first six members' answers and attitudes divided under the hypotheses. Source own arrangement

Hypothesis/ Member	1. Property rights	2. Portfolio	3. Portfolio	4. Portfolio	5. Free-rider	6. Free-rider	7. Horizon
1. Age: 20-39 Loan: 1 MSEK	Would not like proportional voting rights. Would not invest more to gain more votes.	Fixed capital is not a problem due to the financial strength of Landshypotek.	Would invest in Landshypotek.	Would not demand higher dividend on the stock market because of the availability.	A low interest rate is more important than high dividends.	Thinks that the incentives increase and will invest.	Likes the new model because of the possibility to invest 4 %.
2. Age: 40-59 Loan: 1 MSEK	Prefer one member one vote. Would not invest to receive more influence.	Does not like the fact that the capital is fixed during the membership.	Thinks the non marketability is a problem, but will invest not to lose by the change.	Would demand a higher dividend in Landshypotek due to the non marketability.	Low interest rates are more important to be able keep the interest cost at a low level.	The incentives to invest does not increase, would invest not to lose by the change.	Is negative towards the new model and would rather keep the old.
3. Age: 40-59 Loan: 1 MSEK "Elected representative"	Would not invest to gain more votes and prefers one member one vote.	According to the member there is no problem with fixed capital in Landshypotek.	Would rather invest in Landshypotek due to smaller risk and a good profit opportunity.	Due to higher risk would the member require higher dividend at the stock market.	It is better if Landshypotek sets the "right interest rate" and therefore maximize the dividend.	The member's incentive to invest in Landshypotek increases with the new model and will invest.	The member is positive towards the new model.
4. Age: 60+ Loan: 1 MSEK	One member should have one vote, but the incentives to invest would increase with proportional voting rights.	Finds it acceptable that the capital is fixed during the membership.	Prefers investment in Landshypotek due to low risk and does not perceive the fixed capital as a problem.	Due to higher risk in the stock market the member demands a higher return on stocks.	Would rather prefer a low interest rate to a high dividend.	The motives to invest increase and will also invest.	Prefers and is positive towards the new model.
5. Age: 20-39 Loan: 5 MSEK	Would like proportional voting rights, but it does not affect the investments.	Does not see any problems of the non marketability.	Feels more comfortable in investing in Landshypotek.	Demands a higher dividend on the stock market due to higher risk.	Prefers low interest rate instead of high dividend.	The incentives to invest do not increase and will not invest.	Prefers the new model.
6. Age: 40-59 Loan: 5 MSEK	The voting rights should be proportional, but it does not lead to further investments.	Is negative to the fact that the capital is fixed during the membership.	The member will not invest and does not like the non marketability and the member has a short time horizon.	Requires a lower dividend from Landshypotek due to lower risk.	Declares that low interest is more important than high dividend.	The incentives increase if the dividend goal of 10 % is reached, but will not invest.	The member is cautiously positive.

Table 6. Summary of the last six members' answers and attitudes divided under the hypotheses. Source own arrangement

Hypothesis/ Member	1. Property rights	2. Portfolio	3. Portfolio	4. Portfolio	5. Free-rider	6. Free-rider	7. Horizon
7. Age: 60+ Loan: 5 MSEK	Voting rights should not be proportional. Would not invest to the gain more power.	The non marketability is not a problem.	Would invest as much as possible if the dividend is 10 % due to the low risk.	Requires higher dividend in Landshypotek due to the fact that a stock can increase in value.	It is the total calculation that matters. The choice of bank is based on the level of interest rates.	The incentives to invest do not increase, but the member would invest.	Prefers the new model if it implies an improvement for Landshypotek.
8. Age: 40-59 Loan: 5 MSEK "Elected representative"	Might prefer proportional voting rights, but that would not motivate investments.	Has a positive attitude towards the fact of the capital is fixed.	Too short time horizon to make any investments.	Accepts a lower dividend in Landshypotek than the stock market due to other benefits.	Is indifferent because of short time horizon but accept the change if it is better for Landshypotek.	The motive to invest does not increase due to the short time horizon.	The member is very positive and prefers the new model.
9. Age: 60+ Loan: 20+ MSEK	It should be proportional voting rights, but this will not increase the motive to invest.	Finds no problem with fixed capital in Landshypotek because it is a small amount of capital.	Would not invest in Landshypotek because they cannot assure the 10 % dividend.	The risk on the stock market is much higher which leads to higher dividend demands.	Would prefer low interest rates and high patronage refunds instead of high dividends.	The member has no plans of investments in Landshypotek.	Is very negative towards the new model.
10. Age: 40-59 Loan: 20+ MSEK	Would not invest to gain votes but thinks that the voting rights should be proportional.	Due to short time horizon does not the case of fixed capital imply any problem.	Due to short time horizon is the member reluctant to invest in Landshypotek.	Does not require a higher dividend in Landshypotek than in the stock market.	Prefers low interest rates because paid interest expenses is a large expense in the business.	The motive to invest increases but unsure if he/she will invest.	The member is positive towards the new model.
11. Age: 40-59 Loan: 20+ MSEK "Elected representative"	Does not think the voting rights should be proportional and would not invest to gain more power.	Does not see any problems of fixed capital. It leads to better loan terms.	Due to a decreasing risk-taking the member would prefer investments in Landshypotek.	Would demand the same dividend in Landshypotek as in the stock market.	Low interest rate is much more important than high dividend.	The incentives to invest in Landshypotek increase with the new model and will invest.	The member is very positive towards the new model.
12. Age: 20-39 Loan: 20+ MSEK	The voting rights should be proportional which would motivate to more investments.	Finds it very negative that the capital is fixed during the membership. Leads to higher risk.	Prefers stock investments which are not fixed. But will invest not to lose by the change.	Requires a higher dividend at the stock market due to higher risk.	None is the most important it is more important that the new model leads to an improvement.	The incentives increase because the member feels obligated to invest not to lose.	The member is both negative and positive towards the new model.

The above tables 5 and 6 present a summary of the interviewed members' answers and attitudes. These tables contribute to an overview of the members most relevant opinions. The answers and attitudes are categorized under suitable hypothesis to easier depict the overall opinions and to facilitate the analysis

Table 7. Overview of the interviewed members. Source own arrangement

Member	Age group	Time left as a member	Borrowed capital	Contributed capital
Member 1	20-39	15-20 years	Around 1 million	0,03%
Member 2	40-59	15-20 years	Around 1 million	1,40%
Member 3	40-59	15-20 years	Around 1 million	3,30%
Member 4	60+	0-5 years	Around 1 million	1,30%
Member 5	20-39	15-20 years	Around 5 millions	2%
Member 6	40-59	0-5 years	Around 5 millions	0,12%
Member 7	60+	10 years	Around 5 millions	4,70%
Member 8	40-59	0-5 years	Around 5 millions	3,60%
Member 9	60+	15-20 years	20 million +	0,06%
Member 10	40-59	0-5 years	20 million +	-
Member 11	40-59	15-20 years	20 million +	0,80%
Member 12	20-39	15-20 years	20 million +	0,19%

Table 7 shows a list of the interviewed members. The table also presents the borrowed capital, what age group, their contributed capital and how long the members have left in Landshypotek.

## 4.2 Cost of capital

The cost of capital for a new member in Landshypotek has been calculated in four different scenarios. As shown in table 8 the scenarios are the old model, the new model with no active contribution, the new model with active contribution through the use of own assets and the new model with active contribution through the use of a "member loan". Equal for all scenarios is that the loan amounts to 10 million SEK, the time horizon for the loan is 25 years, interest on borrowed capital is a fixed interest rate of 4,3 percent and that the member uses straight-line amortization.

### 4.2.1 Scenario 1

Scenario 1 constitutes Landshypotek's old model where the business surplus is distributed amongst the members according to figure 5 in chapter 1.1.1. The member has not reached the input limit on the equity account. Patronage refund and interest on contributed capital are therefore capitalized on the equity account and paid out as contributed capital three years after terminated membership. The interest on the member account is also capitalized in this scenario and the proceeds on the member account are repaid three years after terminated membership. The member's cost of capital is calculated according to equation (4) in chapter 2.3. The calculations are shown in appendix 3 and the member's cost of capital in scenario 1 is 4,161 percent as show in table 8.

#### 4.2.2 Scenario 2

In scenario 2 Landshypotek has implemented the intended change of contributed capital and the business surplus is distributed according to figure 8 in chapter 1.1.3. In this scenario the member has chosen not to actively contribute with capital either through the use of own assets or the “member loan”. The member has therefore not reached the input limit on the equity account. Patronage refund and dividend on contributed capital are therefore capitalized in the equity account and repaid three years after termination of the membership. The member’s cost of capital is calculated according to equation (5) in chapter 2.3. The calculations are shown in appendix 4 and the member’s cost of capital in scenario 2 is 4,177 percent as show in table 8.

#### 4.2.3 Scenario 3

In this scenario the intended change of contributed capital has been implemented and the member has seized the opportunity to actively contribute with four percent of the borrowed capital through the use of own assets. The member has therefore reached the input limit on the equity account. Patronage refund and dividend on contributed capital are therefore not capitalized on the equity account but paid out directly each year. Landshypotek’s business surplus is distributed according to figure 9 in chapter 1.1.3 and the member’s cost of capital is calculated according to equation (5) in chapter 2.3. The calculations are shown in appendix 5 and the member’s cost of capital in scenario 3 is 3,383 percent as show in table 8.

#### 4.2.4 Scenario 4

Scenario 4 constitutes Landshypotek’s new model where the member chooses to actively fill up the contributed capital up until the input limit through the use of the “member loan”. Patronage refunds and dividends on contributed capital are therefore not capitalized on the equity account but paid out directly each year. The distribution of Landshypotek’s business surplus is as shown in figure 9 in chapter 1.1.3 and the member’s cost of capital is calculated according to equation (6) in chapter 2.3. The calculations are shown in appendix 6 and the member’s cost of capital in scenario 4 is 3,816 percent as show in table 8.

*Table 8. Member’s cost of capital in four different scenarios. Source own arrangement*

<b>Scenario</b>	<b>Cost of capital/ IRR</b>
<b>1. Old model</b>	4,161 %
<b>2. New model (no active contribution)</b>	4,177 %
<b>3. New model (active contribution with own assets)</b>	3,383 %
<b>4. New model (active contribution with member loan)</b>	3,816 %

Table 8 displays the member’s cost of capital for borrowing 10 million SEK in Landshypotek in four different scenarios. The table shows that the member’s cost of capital increases with 0,016 percent in the new model (scenario 2) compared to the old model (scenario 1) if the member chooses to not actively contribute with capital. The lowest cost of capital is achieved with the new model (scenario 3) when a member chooses to actively contribute with capital through the use of own assets. Table 8 also shows that the new model (scenario 4) with an active contribution through the use of a “member loan” is a favorable alternative compared to the old model (scenario 1) where the member’s cost of capital is higher.

As shown in table 8 the new model leads to a higher cost of capital for the member if the member does not choose to actively contribute with capital either through own assets or the “member loan”. But the member is not compelled to actively contribute with the full amount of four percent of the borrowed capital right away, as is the case in scenario 3 and 4. In contrast to the old model where the member is unable to actively contribute with capital, the member can choose to contribute with capital between zero and four percent of the borrowed capital. It is therefore interesting to know how much capital the member needs to contribute in order to attain a lower cost of capital with the new model. As shown in table 8 the member’s cost of capital for borrowing 10 million SEK in Landshypotek’s old model is 4,161 percent. For the new model to be more favorable than the old model, the member has to actively contribute with 3 500 SEK because the member’s cost of capital for borrowing 10 million SEK then is 4,160 percent as shown in figure 26.

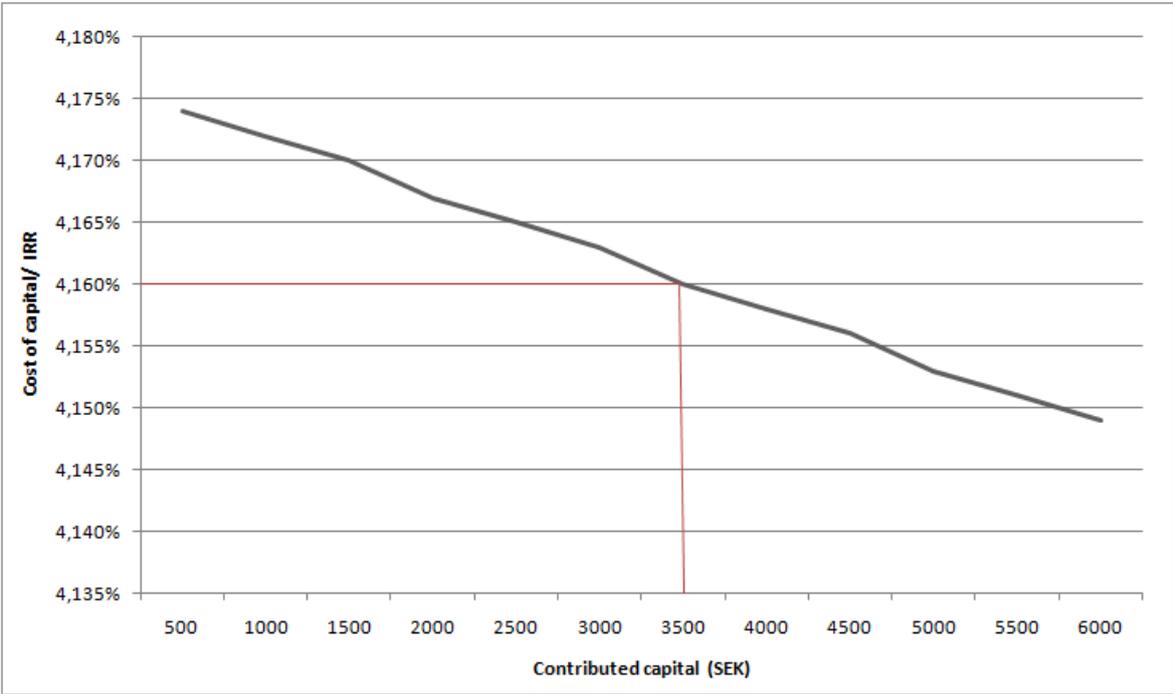


Figure 26. Member’s cost of capital at different amounts of contributed capital in the new model. Source own arrangement

Figure 26 shows that the member’s cost of capital in the new model decreases with higher active contribution of capital. The figure also shows that the member’s cost of capital is 4,160 percent when the member uses own assets to actively contribute with 3 500 SEK. The purpose of this figure is to demonstrate how much a member has to invest in Landshypotek in order to profit from the intended change of contributed capital. The breakpoint is approximately 3 500 SEK, which means that a new member with a 10 million SEK loan has to use own assets to invest a minimum of 3 500 SEK in order to benefit from the new model, otherwise the new model would imply a loss for the member. The member has to invest 3 500 SEK immediately when he/she joins Landshypotek. However, this is total amount of capital a new member actively has to provide during the entire membership.

## 4.3 Reliability and validity

### 4.3.1 Interviews

Reliability traditionally means that the research is free from random influences, the interview should be performed in the same way and therefore create an equal situation for all subjects (Trost, 1997). The interviews in this study follow a premade interview guide which guides the interview through different themes. The interview guide contains questions that are read by the interviewer and therefore asked in exactly the same way during all performed interviews. This minimizes the risk of the interviewer being perceived differently amongst the interviewed members and therefore receiving answers that depend on the interview situation and not the topic at hand. According to Trost (1997) the minimization of the “interviewer effect” reduces random influences and therefore increases the reliability of the results. The random influences impact on the results are further reduced by the fact that each interviewed member in Landshypotek is presented with some of the results at the end of the interview and given the opportunity to ask questions and to add or deny information. The interviewed members are also provided with the final results, after the material from the interviews are consolidated, and given one week to review the content and provide comments.

Reliability also concerns the degree in which a study’s results can be reproduced by another researcher (Merriam, 2006). In this study, all interviewed members are made anonymous in order to achieve complete confidentiality. This minimizes the possibility for another researcher to reproduce and verify the study’s results and therefore reduces the reliability of the study’s results. But according to Kvale (1997) the anonymity also increases the incentives for the interviewed members to answer sincerely, which leads to more valid results. Apart from the members’ identity, it is possible to reproduce the results to some extent by using the selection criteria described in chapter 3.3.2 and the interview guide in appendix 2.

Validity concerns the degree in which the interview questions are a good instrument to measure what is supposed to be measured and to achieve the study’s aim (Trost, 1997). The questions in the interviews are based on the hypotheses in chapter 2.3 who in turn are constructed according to the theories in chapter 2. To ensure that the structure of the interview guide led the interview in the right direction and therefore produced results that were relevant for the study, three pilot interviews were performed with members in Landshypotek. This helped us gain experience as interviewers and to test the questions validity.

The validity of the results might be affected by the fact that eleven of the interviewed members are situated in the region around “Mälardalen”. Compared to members who are situated in the southern parts of Sweden, where a large part of the agribusiness are dominated by livestock production that implies a large amount of fixed capital. The members in the region around “Mälardalen” are more flexible because they do not possess the same amount of capital invested in livestock barns (pers. com Andersson, 2011). This implies rather low transaction costs for the members in the region around “Mälardalen” if they decide to terminate livestock production. They might therefore be more positive towards the possibility of actively contributing with capital in Landshypotek.

The members in the region around “Mälardalen” also belong to the same regional association and therefore go to the same regional meetings. The members therefore might have similar attitudes where some of them already have discussed the topic at regional meetings. Landshypotek’s intended change of contributed capital is however new to the members and

has only been presented before the “elected representatives”. The risk of the member’s attitudes being affected by previous discussions is therefore limited to the “elected representatives” which reduces the impact on the results in this study.

#### 4.3.2 Cost of capital

The member’s cost of capital in the different scenarios are straightforward to reproduce for another researcher because the entire calculations are presented in appendix 3, 4, 5 and 6. The results are therefore easy to verify which increases the reliability. The figures that are used in the calculations are based on information from Landshypotek. These are assessed as relevant for the study because they are the same figures that Landshypotek uses when they present the intended change of contributed capital to the “elected representatives”. This increases the validity of the results. However, the results are limited to one specific type of member who borrows 10 million SEK in Landshypotek and uses straight-line amortization with a time horizon of 25 years. The results can therefore not be applied on existing members which reduces the possibility to draw general conclusions about Landshypotek’s members. This limitation reduces the results validity because the study aims to investigate the current member’s attitudes towards Landshypotek’s intended change of contributed capital.

The four scenarios are created to illustrate the differences between the financial model that Landshypotek uses today and the possibilities that emerge as a result of the intended change of contributed capital. The validity of the results is increased by the fact that the cost of capital is calculated for the different choices that a member can make compared to Landshypotek’s old financial model. However the validity is reduced by the fact that the scenarios do not fully account for the member’s opportunity cost of capital. This is of particular significance in scenario 3 when the member actively contributes with capital through the use of own assets.

## 5 Analysis

This chapter analyzes the results from chapter 4 (the empirical study). The analysis is based on the theories presented in chapter 2 (theoretical perspective and literature review). The analysis intends to confirm or reject the hypothesis.

### 5.1 Property rights

*Hypothesis 1 declares that the members will be reluctant to increase their equity shares because Landshypotek applies “one member one vote”.*

The residual right of control is the right to vote and make decisions concerning an assets use (Cook et al, 2011). Cook argues that a member’s residual return (Landshypotek’s patronage refund and dividend) and residual control should be aligned. This will create incentives to invest capital in the cooperative firm. The theory implies that Landshypotek’s members will prefer a proportional voting right in order to invest capital in the cooperative. The results show that fifty percent of the members would prefer a proportional voting system in relation to their magnitude of contributed capital. But only 33 percent of these members think that a proportional voting right increases their incentives to invest. The remaining fifty percent prefer today’s system that implies “one member one vote” which indicates that their decision to invest capital in Landshypotek is not based on the residual right of control. Even if half of the members would like proportional voting right, they also state that it does not affect their investment decision.

Hypothesis 1 is rejected because the interviewed members’ decision to invest capital in Landshypotek is not based on the residual right of control. The theory is only supported by two of the twelve members whose motives to invest increase with proportional voting rights. Cook’s theory is ruled out by the other ten members, whose incentives to invest do not increase as a result of a system with proportional voting rights. The theory is also dismissed because six of the “investing members” prefer the fact that one member equals one vote. The interviewed members are not interested in increasing their contributed capital in order to gain more votes. This can be compared to the conclusion drawn in Nilsson’s study (2002) which declares that members in “Lantmännen” consider themselves as members and not as owners. The majority of the members in “Lantmännen” therefore have no desire to be more active as owners.

### 5.2 Portfolio problem

*Hypothesis 2 claims that because of the non marketability of Landshypotek’s cooperative equity their members will be reluctant to increase their equity shares.*

The portfolio problem occurs when members are constrained to diversify their portfolio (Jensen & Meckling, 1979). The constraints are an effect of the non marketability of cooperative equity. This could be a problem for Landshypotek’s members because their invested capital is fixed and the patronage refunds and dividends are capitalized within the cooperative.

The second hypothesis is rejected since nine of twelve members do not see any problem with the non marketability of their equity shares. According to the theory the members should dislike the non marketability of their contributed capital, but the members accept that their

cooperative equity is fixed because that is how a cooperative works and they believe it is better for Landshypotek which leads to improvements for the members. The hypothesis is also rejected because the majority of the members are willing to invest capital and believe their incentives to invest increase despite the fixed contributed capital.

*Hypothesis 3 declares that due to the non marketability of Landshypotek's cooperative equity their members will be more interested in investing in investor-owned firms than investing in Landshypotek through an active contribution of capital.*

According to the theory the members should be less interested in investing in the cooperative than an investor-owned firm due to the non marketability of the cooperative equity (Lerman & Parliament, 1993). Nine of the members do not perceive the non marketability as a problem. Five of these members will rather invest capital in Landshypotek because they find the new model profitable, less risky and because the non marketability does not affect their investment decision. The other four choose not to invest capital due to other reasons than non marketability. They are reluctant to invest because of a short time horizon. They need the capital to more urgent investments and since Landshypotek cannot assure the dividend to be ten percent. The members' opinions about the non marketability problem disaffirm the hypothesis.

On the other hand there are three members who believe that the fixed capital is problematic. Two members would only invest not to lose by the intended change of contributed capital. This implies that they do not see the non marketability as too big of a problem, which also leads to a rejection of the hypothesis. The last of these three members would not invest at all in Landshypotek. He/she finds that the fixed capital is a very big problem and is therefore the only member whose attitude supports the hypothesis. The members' collected attitudes towards the non marketability of cooperative equity lead to a rejection of the third hypothesis.

*Hypothesis 4 states that because of the non marketability of the members' cooperative equity the members will demand a higher rate of return on their contributed capital than they would on an investment in an investor-owned firm.*

Jensen & Meckling (1979) argue that members who invest in a cooperative should demand a higher rate of return compared to an investment in an investor-owned firm because of the non marketability of cooperative equity. This theory is dismissed because eight of twelve (one is indifferent) require a lower rate of return on their contributed capital in Landshypotek than they would require on invested capital in investor-owned firms as shown in table 5 and 6. The members demand a lower dividend due to lower risk in Landshypotek. The theory is only supported by one member who demands a higher rate of return in Landshypotek because of the fixed contributed capital. One member demands higher dividend in Landshypotek due to another reason. He/she demands a higher dividend in Landshypotek because contributed capital does not give the possibility to benefit from the increase in value as much as an investment in stocks could do. The fourth hypothesis is therefore rejected because the majority of the members would not require a higher dividend on their contributed capital than they would on an investment in an investor-owned firm.

### 5.3 Free-rider problem

The free-rider problem occurs when a member joins Landshypotek without contributing with any or little capital (Vitaliano, 1983). The new member gets access to the collectively owned

capital in the cooperative which older members have accumulated. New members also acquire the right to vote and the right to the cooperative's residual cash flow against little counter performance.

According to Lerman & Parliament (1993) members will rather seek to benefit directly through their business relation with the cooperative than earning return on invested capital. *Hypothesis 5 states that Landshypotek's members will prefer a lower interest rate on borrowed capital instead of a high dividend on contributed capital.* According to figure 23, 84 percent of the interviewed members believe that a low interest rate on borrowed capital is more important than a high dividend on contributed capital. Of the two members (member 3 and 12) that constitute the remaining 16 percent one states that the interest rate should be determined so that the dividend on contributed capital is maximized. The second of the two members declares that he/she is indifferent between low interest rate and high dividend as long as the total result is as favorable as possible. This implies that only one of the interviewed members prefers a high dividend on contributed capital to a low interest on borrowed capital. Hypothesis 5 is therefore confirmed. According to the theory this indicates that the members are more interested in benefitting directly through their commercial relationship with Landshypotek than earning a return on invested capital.

In the financial model that Landshypotek uses today the interest on contributed capital is small compared to the patronage refund. This implies that the members in Landshypotek mostly profit through their dealings with the cooperative. Because of this and the fact that the members are unable to actively contribute with capital, the incentives to invest capital in Landshypotek's old financial model is practically nonexistent. According to Harris et al, (1996), Landshypotek therefore experiences problems with free-riders because new members gain access to equity, contributed by the older members. The new members are therefore able to harvest benefits that they have not fully contributed to. Further as described above, the interviewed members prefer a low interest rate compared to a high dividend which indicates that they are more interested in benefitting directly through their business relation with Landshypotek than earning a return on invested capital. This implies that the interviewed members have a tendency to become free-riders also in the new model if there are no incentives to invest capital.

According to the property rights theory, the risk of free-riders decreases if the incentives for the members to invest in the cooperative increases. *Hypothesis 6 states that the intended change of contributed capital will reduce the risk of the free-rider problem because the dividend on contributed capital creates an incentive for members to invest capital in Landshypotek.* The hypothesis is supported by seven of the interviewed members who state that their incentives to invest capital in Landshypotek increases with the intended change of contributed capital. Two of the five members (member 7 and 2) who state that their incentives to invest capital in Landshypotek do not increase as a result of the intended change of contributed capital, also state that they would actively contribute with capital in Landshypotek if the intended change is implemented. Member 7 believes that members with large contributed capital will benefit the most from the intended change and member 2 states that he/she will invest in order not to lose by the intended change. This contradicts member 7 and 2 statements that their incentives to invest in Landshypotek do not increase. This can be interpreted as their incentives to invest in Landshypotek increases subconsciously.

In Landshypotek's new financial model it is necessary to contribute with capital in order to profit to the same extent as before. According to figure 26, a new member that borrows 10

million over 25 years needs to actively contribute with approximately 3 500 SEK in order to attain the same cost of capital as in the old model. This amount of 3 500 SEK is not much money and a new member should be able to invest that capital. Table 8 also shows that it is possible for the member to further reduce the cost of capital by making a full capital contribution of four percent of the borrowed capital, either through the use of the “member loan” or by own assets. The results from the calculations of a member’s cost of capital in chapter 4.2 reveals that Landshypotek’s new financial model is a reward system which thereby creates incentives for members to invest capital in Landshypotek.

According to the majority of the interviewed members, their incentives to invest capital in Landshypotek increase with the intended change of contributed capital. The results from chapter 4.2 also show that the new financial model rewards investing members with lower cost of capital. According to the property rights theory, these increased incentives to invest capital in the new financial model imply that Landshypotek’s intended change of contributed capital will lead to a reduced risk of free-riders. Hypothesis 6 is therefore confirmed.

## 5.4 Horizon problem

*Hypothesis 7 declares that members with long time left in Landshypotek will be more positive towards the intended change of contributed capital than members with a short time left and therefore also be more interested in investing capital in Landshypotek.*

According to figure 25 almost 70 percent of the interviewed members are overall positive towards Landshypotek’s intended change of contributed capital. According to hypothesis 7, members with long time left in Landshypotek will be more positive towards the intended change of contributed capital than members with a short time left. Half of the members who are overall positive towards the intended change have a time horizon of 15-20 years and the remaining half have a time horizon of 0-5 years as shown in table 9. It is therefore not possible to draw any straightforward conclusion from the interviewed members who are positive. However, figure 25 also shows that 17 percent of the interviewed members are very negative or negative towards the intended change. According to the theory, these members should have a shorter time horizon than those who are positive. Among the 17 percent who are negative, all interviewed members have a time horizon of 15-20 years which therefore contradicts the theory. Finally one member (eight percent) with a time horizon of 15-20 years is indifferent towards the intended change and the member with a time horizon of ten years has no opinion. The first part of hypothesis 7 is therefore rejected because the results do not show that members with a longer time horizon have a tendency to be more positive towards the intended change of contributed capital.

According to Nilsson (2001) the members with shorter time left in the cooperative should be less interested in investing in the cooperative than members with longer time left. This leads to the conclusion that members who are willing to invest capital in Landshypotek should have a long expected time horizon. Seven of the interviewed members state that they will invest capital in Landshypotek if the intended change of contributed capital is implemented. Table 9 illustrates that five of these members have a time horizon of 15-20 years, which therefore is in accordance with the theory. One member has a time horizon of ten years, which in this case can be considered as both a long and short time horizon. The last of the members who are willing to invest capital has a time horizon of 0-5 years, which contradicts the theory. The theory also indicates that the members who are reluctant to invest capital in Landshypotek should have a short expected time horizon. Five of the interviewed members state that they

will not invest capital in Landshypotek if the intended change is implemented. Among the five non investing members there are three members who have a time horizon of 0-5 years who therefore are in accordance with the indication. The indication is however contradicted by two of the non investing members who have a time horizon of 15-20 years. This implies that five members with a time horizon of 15-20 years are willing to invest and three members with a time horizon of 0-5 years are reluctant to invest. This leads to the conclusion that eight of the interviewed members support the theory. The second part of hypothesis 7 that states that members with long time left in Landshypotek will be more interested in investing capital is therefore confirmed.

Hypothesis 7 is therefore partly rejected and partly confirmed because the results are ambiguous show little or no connection between the members' expected time horizon and their overall attitudes towards Landshypotek's intended change of contributed capital. However, the results show that members with a long time left as members are more interested in investing capital in Landshypotek.

*Table 9. The members' attitudes towards the new model and their ambition to invest. Source own arrangement*

<b>Time horizon</b>	<b>Overall perception</b>				<b>Investing</b>	
	<i>Positive</i>	<i>Negative</i>	<i>Indifferent</i>	<i>No opinion</i>	<i>Yes</i>	<i>No</i>
0-5 years (4 members)	4				1	3
10 years (1 member)				1	1	
15-20 years (7 members)	4	2	1		5	2
Total	8	2	1	1	7	5

Table 9 displays the members' overall perception of the intended change of contributed capital. The members are divided in groups based on their expected time left as members in Landshypotek. Table 9 also reveals how many of the members that intend to invest capital in Landshypotek.

## 6 Conclusions

The purpose with this chapter is to draw conclusions from the analysis and the results and therefore be able to answer the questions stated in the aim.

*The aim of the study is to answer the following questions:*

- Will Landshypotek's members be negative towards increasing their illiquid stake?
- Will the intended change of contributed capital reduce the risk of free-rider problem?
- Will members with a long time left in Landshypotek be more positive towards the intended change of contributed capital than those with a short time left?
- Will members terminate their business relationship with Landshypotek due to the intended change of contributed capital?
- How will the intended change of contributed capital affect a member's cost of capital?

### 6.1 Will Landshypotek's members be negative towards increasing their illiquid stake?

The analysis shows that the member's decision to invest capital in Landshypotek is not based on the residual right of control and they will therefore not be reluctant to increase their equity shares because Landshypotek applies "one member one vote". The majority of the interviewed members also perceive no problem with the non marketability of Landshypotek's cooperative equity. It is demonstrated that the incentives to invest increase despite the fixed contributed capital and according to the analysis, the non marketability of Landshypotek's cooperative equity will therefore not lead to that the members will be reluctant to increase their equity shares.

As discussed above the majority of the interviewed members see no problem with the fact that Landshypotek's cooperative equity is non marketable. The non marketability of Landshypotek's cooperative equity therefore does not imply that the interviewed members are more interested in investing in investor-owned firms than investing in Landshypotek through an active contribution of capital. The decision to invest capital in Landshypotek is governed by other factors such as lower risk compared to the stock market and the fact that they find the new financial model profitable. The analysis also shows that the interviewed members' attitudes towards the non marketability of the cooperative equity and their perception that the risk of investing capital in Landshypotek is lower compared to the stock market. This implies that fact the members will not demand a higher rate of return on their contributed capital than they would on an investment in an investor-owned firm.

Hypotheses one, two, three and four are all rejected and the conclusion therefore is that Landshypotek's members will not be negative towards increasing their illiquid stake.

## 6.2 Will the intended change of contributed capital reduce the risk of free-rider problem?

According to the analysis, Landshypotek experiences problems with free-riders in the old financial model. It is also shown that there are tendencies among the members to become free-riders in the new financial model.

However, the analysis reveals that the intended change of contributed capital is a system that creates incentives to invest capital because investing members are rewarded with lower cost of capital. It is shown that a member's cost of capital decreases if the members increase their contributed capital. In comparison with the old financial model, a member borrowing 10 million SEK over 25 years only has to use own assets to invest amounting to approximately 3 500 SEK in order achieve the same cost of capital after the intended change of contributed capital is implemented as shown in figure 26. The analysis also shows that the majority of the interviewed members' incentives to invest capital in Landshypotek increase consciously or subconsciously as a result of the intended change of contributed capital. According to the analysis, these increased incentives to invest capital will lead to a reduced risk of free-riders. The overall conclusion is therefore that the intended change of contributed capital will reduce the risk of free-rider problem.

## 6.3 Will members with a long time left in Landshypotek be more positive towards the intended change of contributed capital than those with a short time left?

The results show that the majority of the interviewed members are overall positive towards Landshypotek's intended change of contributed capital. However, the analysis shows that there is little or no connection between the members' expected time horizon and their overall attitudes towards Landshypotek's intended change of contributed capital. It is therefore not possible to draw a conclusion based on merely the interviewed members overall attitudes towards the intended change of contributed capital. But the analysis also shows that the assertion that members with a long time left in Landshypotek will be more interested in investing capital is supported by the majority of the interviewed members. The possibility for the members to actively contribute with capital in Landshypotek is the main feature in Landshypotek's intended change of contributed capital. The relationship between the members' expected time horizon and their willingness to invest capital in Landshypotek is therefore considered to be an important aspect when trying to answer the question above. The conclusion is that the members, regardless of their expected time horizon, are positive towards the intended change of contributed capital and that members with long time left in Landshypotek are even more positive towards the possibility to actively contribute with capital.

## 6.4 Will members end their business relationship with Landshypotek due to the intended change of contributed capital?

The results show that almost none of the interviewed members will terminate their membership in Landshypotek if the intended change of contributed capital is implemented. One member intends to calculate the difference in comparison with the old financial model and then make a decision whether to remain as member or not based on what other credit institutions offer. The results also show that 42 percent of the interviewed members' decision to remain as a member in Landshypotek is not affected by the dividend on contributed capital. The remaining 58 percent express that the dividend rate is of importance when the

membership is considered as shown in figure 22. The conclusion is that the members are not likely to terminate their business relationship with Landshypotek due to the intended change of contributed capital as long as Landshypotek achieves the goal of ten percent dividend on contributed capital.

#### 6.5 How will the intended change of contributed capital affect a member's cost of capital?

The results show that the intended change of contributed capital has a small effect on a member's cost of capital as long as the member chooses not to invest capital in Landshypotek. It is shown that a member's cost of capital for borrowing 10 million SEK over 25 years increases with 0,016 percent in the new financial model compared to the old model if the member chooses not to invest any capital. The cost of capital decreases with higher contributed capital and in order to achieve a lower cost of capital in the new financial model, the member needs to invest approximately 3 500 SEK through the use of own assets. The lowest cost of capital is achieved when the member chooses to actively contribute with four percent of the borrowed capital. It is possible for a member to reduce the cost of capital for borrowing 10 million SEK over 25 years with 0,78 percent or 0,35 percent with an full active contribution of capital, through the use of own assets or the "member loan" respectively. The conclusion is that the intended change of contributed capital tends to increase the cost of capital for non investing members and decrease it for investing members.

## 7 Discussion

This chapter aims to discuss the empirics and results from the analysis and the conclusions.

According to the analysis the members do not find the non marketability of Landshypotek's cooperative equity as a big problem. However, eight of the interviewed members are negative towards the fact that the contributed capital is paid out three years after the membership is terminated. This indicates that the members do not like the non marketability of their equity shares. But the members accept it as long as they are members because that is how the cooperative works and it improves the conditions for Landshypotek to attract loan capital.

One of the conclusions is that the intended change of contributed capital reduces the free-rider problem, partly because the dividend is prioritized at the expense of the patronage refund. This implies that the new model creates incentives to invest capital because investing members are rewarded. According to the results most of the interviewed members find it acceptable that members with large contributed capital will benefit the most from the new model. The members think this is fair because these members have contributed more and helped build up the cooperative. This is also the conclusion in the Nilsson (2002) study where the members in "Lantmännen" believe that the members who contribute with capital should be rewarded. This indicates that the intended change of contributed capital will further reduce the risk of free-riders in Landshypotek because the members do not only understand that investing members are rewarded but also believe that members who do not invest capital should profit less.

In the selection of the respondents there was at first a criterion with the purpose to divide the members in groups according to their expected time left as a member. The aim with this criterion was to make it easier to analyze the horizon problem. But according to Landshypotek's chief financial officer, Björn Ordell, it would be impossible to achieve this selection criterion because Landshypotek has no knowledge of the members' expected time horizon. This made it very hard to choose respondents based in their expected time left in Landshypotek. The selection was then partly based on the members' age instead. This did not result in a perfect distribution and among the interviewed members there are a majority of members with a longer time horizon. The results would have been easier to analyze with a more even distribution of members with different time horizons. It might have been possible to avoid this problem by using another method to select the respondents. One method could have been to first do a minor telephone interview to receive necessary information about the members and then choose members according to the selection criteria.

The conclusions never really answer the question if members with longer time horizon are more positive towards the intended change. But the conclusions state that members with longer time left in Landshypotek are more positive towards investing capital in Landshypotek. This might indicate that members with longer time horizon also are more positive towards the intended change because the possibility to invest capital constitutes an essential part of the intended change. It is therefore not unreasonable to assume that members with a long time left in Landshypotek also are more positive towards the intended change of contributed capital than members with a short time left.

The results indicate that the members will not terminate their membership because of the intended change of contributed capital. The general opinion is that the interest rate is the most important aspect and the majority of the interviewed members state that they will only change

credit institute if they attain better lending conditions elsewhere. The analysis also concludes that the members prefer low interest rate rather than a high dividend. One of the reasons for this is that the members believe that it is easier to compare Landshypotek with other credit institutions on the basis on the interest rate. This is something that Landshypotek should be aware of when they present the intended change of contributed capital to their members. The results support the importance of presenting the intended change of contributed capital in terms of lower interest rates rather than lower interest payments that are expressed in real terms. This will probably lead to an enhanced interest towards the intended change of contributed capital because the members are very focused on the interest rate.

According to the conclusions it is important for Landshypotek to achieve the goal of ten percent dividend on contributed capital in order not to lose any members. However, the members might not terminate their membership if the dividend goal is not reached during a single year. But many of the interviewed members, state that they will consider other credit institutions if Landshypotek fails to deliver the dividend goal for two-three years consecution. The members also express that if Landshypotek promise something they should also be able to keep it. The results show that there is an acceptance of a lower dividend rate as shown in figure 22. It is also shown that several of the interviewed members believe that ten percent dividend sounds “too good”. This implies that it is possible for Landshypotek to lower the dividend goal without making the members negatively inclined towards the intended change of contributed capital. This is something that Landshypotek should consider, at least in the first years after the implementation of the change. A failure to deliver dividend in accordance with the goal might cause substantial “bad will” among the members.

## 7.1 Future research

This study is very qualitative and only investigates twelve members’ attitudes. After the implementation there is no need to explain the change of contributed capital to the members, which supports the possibility to conduct a quantitative study. A proposal for further studies therefore is to perform a survey regarding the members’ attitudes towards the new financial model, after the intended change of contributed capital is implemented. This kind of study would, to a larger extent, capture the members’ collective attitudes and also help Landshypotek to further develop their financial model.

The study contains a review of “Lantmännens” and “Södras” models for transferring non-restricted equity to restricted equity by issuing bonus shares. The study also includes a short presentation of the conclusions from the study “Medlemmen som ägare: Effekterna av insatsemissioner I Svenska Lantmännen” and “Attityder till kooperativ finansiering”. “Lantmännen”, “Södra and “Milko” are all Swedish cooperatives whose main businesses are not within cooperative banking. Although several attempts has been made the authors have been unable to find relevant study’s regarding contributed capital in cooperative banks. A proposal for future studies therefore is to conduct a literature review regarding financial models and the members’ attitudes towards contributed capital in international cooperative banks, in order to examine what Landshypotek can learn from similar cooperatives.

Finally it would be interesting to use other theoretical perspectives in order to investigate the members’ attitudes towards Landshypotek’s intended change of contributed capital. By using option theory it is possible to calculate the value of a member’s invested capital in a future sale of Landshypotek. The return on a member’s invested capital would probably be extensive if Landshypotek were to be sold. Is this something that affects the members’ willingness to

invest capital in Landshypotek and thereby their attitudes towards the intended change? It would also be interesting to use risk theories in order to calculate the risk of changing inflation rates, interest rates and dividend rates. How are the members' attitudes towards the intended change of contributed capital affected by these risks?

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## **Personal messages**

Björn Ordell  
Chief Financial Officer, Landshypotek  
Personal meeting, 2011-03-04

Hans Andersson  
Professor at the department of economics, SLU  
Personal meeting, 2011-05-12

# Appendix 1: Factsheet

## Dear member in Landshypotek!

Our names are Fredrik Grönvall and Hannes Rydmark and we are studying to become agronomists at the Swedish University of Agricultural Sciences in Uppsala.

We are in the final stage of our education and have started our master thesis that intends to investigate Landshypotek's members' attitudes towards an intended change of the contributed capital. The idea has emerged through discussions with Landshypotek's chief financial officer Björn Ordell and we have designed the thesis together with our supervisor Hans Andersson at the Department of Economics, Swedish University of Agricultural Sciences, Ultuna. The theories that are used in the thesis are the property rights theory, investment theory and financial theory.

The study is conducted as a qualitative study of empirical material obtained through in-depth interviews with twelve members in Landshypotek. In order to capture Landshypotek members' collective opinions it is important to interview members with different backgrounds. We are therefore contacting you because you meet the criteria for one of these backgrounds. Your contact information has been administered to us by Mats Du Rietz, District Manager at Landshypotek.

Your participation in this study is of course optional, but we want to stress that your responses are important for our investigation. The interview will take approximately one hour to complete and we would appreciate if we could visit you.

**Your responses will of course be treated confidentially and after the compilation, it will not be possible to discern an individual's responses.**

## Facts about Landshypotek

Landshypotek is today owned by an economic association consisting of around 50 000 members. The fact that the members own Landshypotek also means that they are helping to finance the business. With the financial model that Landshypotek uses today, the members have collectively built up an equity that amounts to around 3,5 billion.

To meet the market's growing need for capital Landshypotek is required to expand the business and is therefore in need of increased funding. Landshypotek is therefore considering to introduce a change in the funding model that is used today at the end year 2011/ beginning of year 2012.

## Today

Landshypotek's profits are today distributed to borrowers (members) through patronage refund on interest that the borrowers paid during the year. How large the patronage refund will be is determined each year on Landshypotek's annual meeting. In 2009 the patronage refund was 4,5 %, which meant that the members received a refund that amounted to 4,5 % of their individual paid interests. Of the received patronage refund, 70 % is deposited into an equity account until it reaches 8 % (input limit) of the borrowed capital. The remaining 30 % and any excess of the input limit are deposited into a member account. The proceeds on the equity account serve as the members' contributed capital and are paid out first three years after the members exit from Landshypotek. The contributed capital is fixed for the whole lending period but the proceeds on the member account offers three choices. Keep the money in the member account and receive interest, receive deduction of interest payments or request cash payout (minimum withdrawal is 5000 crones). Both the equity account and member account are interest bearing and for the last ten years the interest rate has averaged around 5%.

## Tomorrow

The change in the financial model that Landshypotek is considering implies that the member account is removed and that the input limit on the equity account is reduced from 8% of the borrowed capital to 4%. Instead of interest on contributed capital the members will be entitled dividend that is proportional to the size of their contributed capital. Patronage refund and dividend on contributed capital are capitalized on the equity account until it reaches 4 % of the borrowed capital. The change in the financial model also allows the members to deposit the full amount of contributed capital right away, either through a “member loan” or the use of own assets. By doing so, the member will receive direct payout of both patronage refund and dividend. The change will also give the board of directors the opportunity to each year change the input limit if needed.

Following the change in the financial model, Landshypotek’s profits will be distributed amongst the members through dividend on contributed capital and patronage refund on paid interests. Because dividends and patronage refund are based on the business surplus, it is impossible to say in advance how large they will be, but the goal is to give 10 % dividend on contributed capital, and 1 % patronage refund on paid interests. With this change Landshypotek hopes to attain the funds needed to expand the business and to reward the members who contribute with capital.

We now want to investigate the members' attitudes towards this intended change of contributed capital. Since the members (borrowers) also owns and finances the business, it is important for Landshypotek to investigate their attitudes towards the change. We believe that this study that also highlights the possibilities with the change may be of interest to you as an owner of Landshypotek. We would appreciate it if you wanted to participate in this interview, which will be of great help to us in this thesis.

Sincerely,

**Fredrik Grönvall**  
**0702- 461512**  
[a06frgr1@stud.slu.se](mailto:a06frgr1@stud.slu.se)



**Hannes Rydmark**  
**0709- 966033**  
[a06hary1@stud.slu.se](mailto:a06hary1@stud.slu.se)



## Appendix 2: Interview guide

We are studying to become agronomists and are currently performing a master thesis with the intention to examine Landshypotek members' attitudes an intended change of the contributed capital. The idea has emerged through discussions with Landshypotek's chief financial officer Björn Ordell. Landshypotek has also provided us with contact information for suitable members, but otherwise the thesis is completely independent of Landshypotek.

We would like to record the interview and hope that this is okay. There is no right or wrong answers, we are only interested in your attitudes towards the intended change. Your responses will of course be treated confidentially and after the compilation, it will not be possible to discern an individual's responses.

### *Opening questions*

1. What type of property do you own?
2. What is the property's main focus?
3. For how long have you been a member in Landshypotek?
4. What is your expected time horizon of your remaining membership?
5. How old are you?
6. What is your reason for being a member in Landshypotek?
  - a) What are the criteria that made you chose Landshypotek?
  - b) Why did you not chose another credit institute?
7. How large is your total loan sum?





20. What is attitude towards contributing with capital in Landshypotek when the capital is fixed during the entire term of the membership?
21. What is your attitude towards the fact that the contributed capital is repaid first three years after the membership is terminated
22. Do you consider Landshypotek to be a cooperative that historically has taken small risks
- a) If yes, do you believe that the intended change of contributed capital will change Landshypotek's risk profile?

#### CONTRIBUTED CAPITAL

23. How large is your contributed capital today?
24. If the intended change of contributed capital is implemented, what is your attitude towards actively increasing your contributed capital in Landshypotek?
- a) Why do you want to/ not want to increase your contributed capital?
- b) How much of your borrowed capital would you be willing to actively contribute with?
- 0 %   2 %            4 %
- c) What is your reason for choosing this amount?
25. Would you be willing to contribute with more than the input limit of 4 % of the borrowed capital?
- a) If yes, how much would you be willing to contribute with?
26. What would make you interested in contributing with more capital?

27. Who do you believe will profit the most from the intended change, members with a large or small amount of contributed capital?

- a) If members with a large amount of contributed capital were to profit more, what is your attitude towards this?
- b) Do you feel compelled to contribute with capital in order not to lose by the intended change?

## DIVIDEND

28. What dividend rate would you require on your contributed capital?

- a) What is your reason for choosing that dividend rate?

29. Would you require a higher dividend rate on your contributed capital compared to what you would require on capital invested on the stock market?

- a) Why do you demand a higher/ lower dividend on your contributed capital compared to capital invested on the stock market?

30. Which of the following dividend rates would make you terminate your membership in Landshypotek?

0 %   2 %            4 %            6 %            8%   the dividend does not affect the decision

- a) If the dividend does not affect the decision, what is the reason for this?

## *Behavior and attitudes*

31. Does your reason for being a member change and in that case how, if the intended change of contributed capital is implemented?

32. Will you more closely follow what happens in Landshypotek if the intended change is implemented?





## Appendix 3: Old model

Interest on borrowed capital	4,3%														
Intereset on contributed capital	2,5%														
Patronage refund in percent of paid interest	4,5%														
Interest on member account	3,05%														
Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Member account (M)		5805	11378	16895	22351	27742	33068	38326	43514	48631	53673	58639	63527	68334	73058
Contributed capital (C)		13545	26548	39348	51932	64293	76427	88329	99992	111411	122579	133492	144141	154522	164627
Borrowed capital (LO)	10000000	9600000	9200000	8800000	8400000	8000000	7600000	7200000	6800000	6400000	6000000	5600000	5200000	4800000	4400000
Interest on borrowed capital (i)		-430000	-412800	-395600	-378400	-361200	-344000	-326800	-309600	-292400	-275200	-258000	-240800	-223600	-206400
Straight-line amortization (a)		-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000
Patronage refund (Pr)		19350	18576	17802	17028	16254	15480	14706	13932	13158	12384	11610	10836	10062	9288
Interest on contributed capital (ic)		0	339	664	984	1298	1607	1911	2208	2500	2785	3064	3337	3604	3863
Interest on member account (im)		0	177	347	515	682	846	1009	1169	1327	1483	1637	1788	1938	2084
Net cash flow per year	10000000	-830000	-812800	-795600	-778400	-761200	-744000	-726800	-709600	-692400	-675200	-658000	-640800	-623600	-606400
Cost of capital/ IRR	4,161%														

15	16	17	18	19	20	21	22	23	24	25	26	27	28		
77696	82247	86706	91072	95342	99513	103582	107546	111402	115147	118777	122288	125911	129641		
174450	183984	193221	202155	210778	219083	227061	234706	242008	248959	255551	261775	268164	274708		
4000000	3600000	3200000	2800000	2400000	2000000	1600000	1200000	800000	400000	0	0	0	0		
-189200	-172000	-154800	-137600	-120400	-103200	-86000	-68800	-51600	-34400	-17200	0	0	0		
-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	-400000	0	0	0		
8514	7740	6966	6192	5418	4644	3870	3096	2322	1548	774	0	0	0		
4116	4361	4600	4831	5054	5269	5477	5677	5868	6050	6224	6389	6544	0		
2228	2370	2509	2645	2778	2908	3035	3159	3280	3398	3512	3623	3730	0		
-589200	-572000	-554800	-537600	-520400	-503200	-486000	-468800	-451600	-434400	-417200	0	0	404349		







## Appendix 7: Distribution of contributed capital in Landshypotek

Contributed capital/ debt	Members	Contributed capital (SEK)	Debt (SEK)
0,0 % - 0,5 %	7769	25980478	14127239145
0,5 % - 1,0 %	3034	54841129	7417976156
1,0 % - 1,5 %	2904	70150268	5688555683
1,5 % - 2,0 %	2882	72951829	4211621225
2,0 % - 2,5 %	2529	66159689	2958615234
2,5 % - 3,0 %	2429	64294622	2350107667
3,0 % - 3,5 %	2308	56027748	1733425781
3,5 % - 4,0 %	1914	47625231	1276313634
4,0 % - 4,5 %	1833	42212573	994203747
4,5 % - 5,0 %	1812	41351571	870905349
5,0 % - 5,5 %	1643	37234989	711704600
5,5 % - 6,0 %	1532	35279090	614301539
6,0 % - 6,5 %	1322	29792504	476141826
6,5 % - 7,0 %	1371	29515039	437471078
7,0 % - 7,5 %	1356	29024773	400183680
7,5 % - 8,0 %	1594	26298014	338884886
Over 8 %	23492	297563429	1482384348
Total	61724	1026302976	46090035578