

Spending, saving or investing?

The asset management of sixteenth-century Holland households.

Jaco Zuijderduijn and Tine De Moor

Tables and figures

Table 1: Overview of advantages and disadvantages of investment opportunities, in terms of profitability, risk, monitoring costs and liquidity

Type	Profitability	Risk	Monitoring costs	Liquidity
Real estate	4%-5%	Low	Low	Low
Cattle	[5%]	Medium	High	Medium
Life annuities	10%	High	Low	Low
Redeemable annuities	6%	Medium	Low	Medium
Shares in ships	12%	High	Medium	Medium
Cash	[-2%]	Medium	Low	High

Sources: see text.

Table 2: Rent/purchase price of land in Holland's Noorderkwartier in 1514

Village	ratio (%)	Village	ratio (%)	village	ratio (%)
Heemskerk	5.0	Schermer	2.5 - 18.8	Zuiderwoude	4.0
Heiloo	5.0	Graft	7.5	Nek	5.0
Uitgeest	4.8	Assendelft	5.0	Oosthuizen	4.0
Akersloot	6.7	Wimmenum	5.0	Purmerend	3.3
Castricum	5.0	Bakkum	2.0 - 6.0	Purmerland	4.0
Katwoude	4.4	Westzaan- Krommenie	3.8	Oostzaan	3.3
Wijk aan duin	5.0	Alkmaar	3.0 - 4.0	Ransdorp	5.0
Limmen	5.0	Wormer-Jisp	5.0	Schellingwoude	5.0

Sources: Fruin (1866); Van der Woude (1972/1973, p. 525).

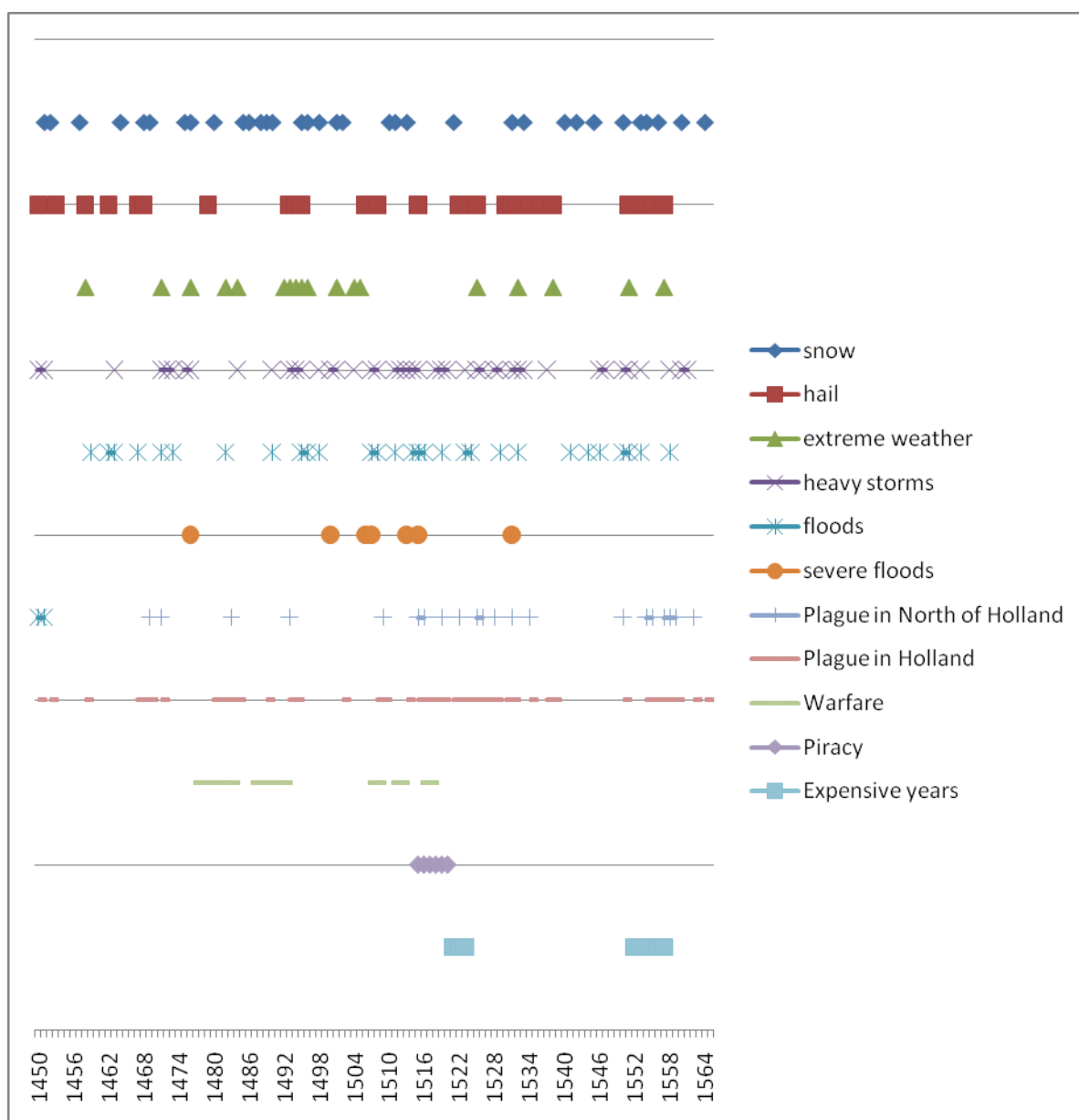
Table 3: Population/taxed households 1506-1563/1569

Sample/year	1506	1514	1530	1546	1554	1563/1569
Population Edam		2.337				3.752
Population De Zeevang		3.655				5.765
Population (total)		5.992				9.517
Households (pachtk.)	1.194	1.135	1.305	1.438	1.608	1.713
Households (schotk.)		1.382		1.696	1.662	1.742

Source for population estimates 1514 and 1563: Boschma-Aarnoudse (2003, p. 421-6).

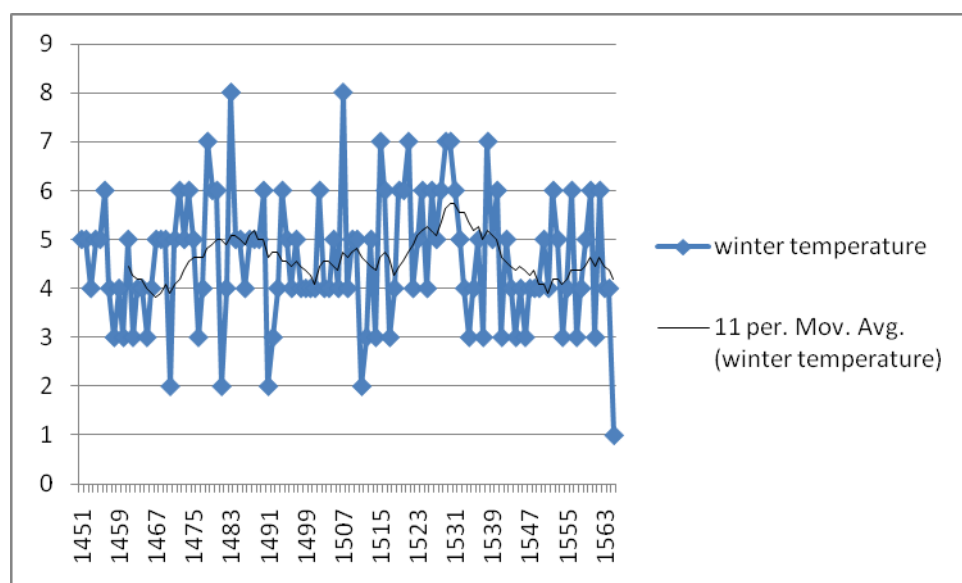
Source for *pacht* and *schot*: Boschma-Aarnoudse (2003, p. 458-70).

Figure 1: External shocks in Edam, 1450-1565



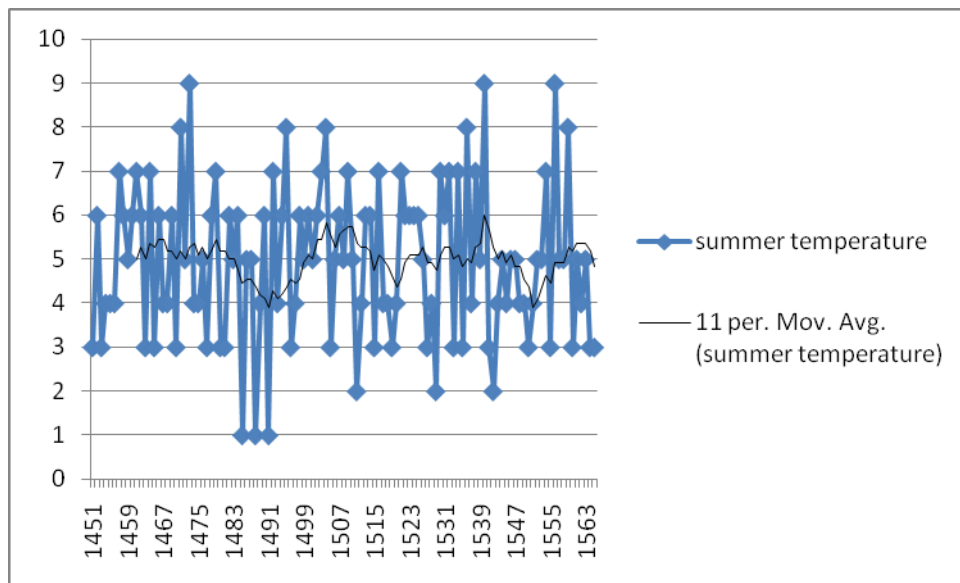
Sources for weather: Buisman (1995, pp. 743-7). We have only included Buisman's observations for the Low Countries and have left out observations for more remote areas. Source for plague years: Noordegraaf and Valk (1988). Sources for prices: Noordegraaf (1985, pp.28-41). Other sources: see text.

Figure 2: Winter temperatures in the Low Countries, 1450-1565



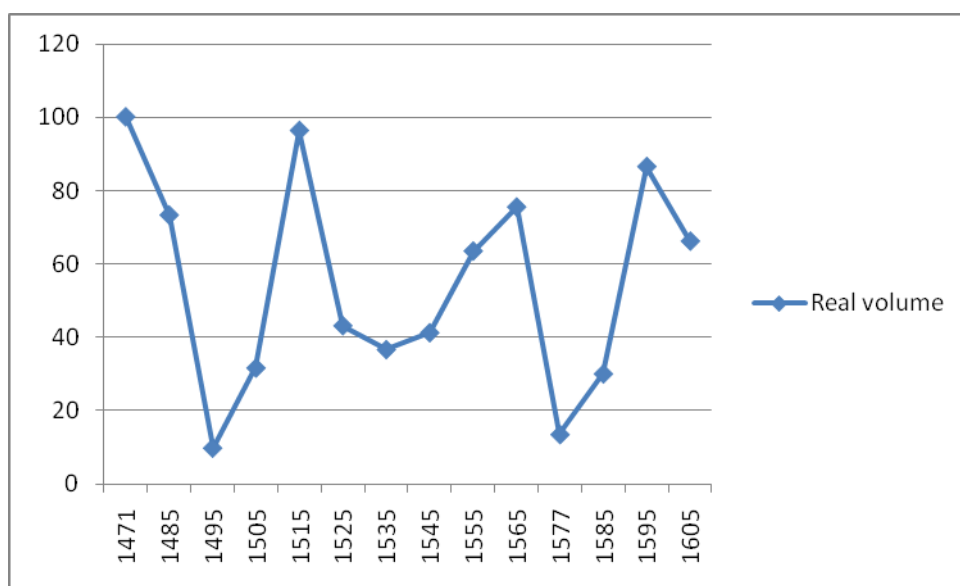
Source: Buisman (1995). Following Buisman, we have expressed temperatures on a scale from one to ten, one being extremely low, ten extremely high temperatures. For practical purposes we did reverse the scale Buisman used: in our figure 1 corresponds with low temperatures.

Figure 3: Summer temperature in the Low Countries, 1450-1565



Source: Buisman (1995, pp. 743-7).

Figure 4: Real volume of Haarlem capital market



Source: Zijderduijn (2008). Figures are corrected for population growth and inflation, 1471=100.

Figure 5: Butter prices in Utrecht and Leiden, 1449-1565

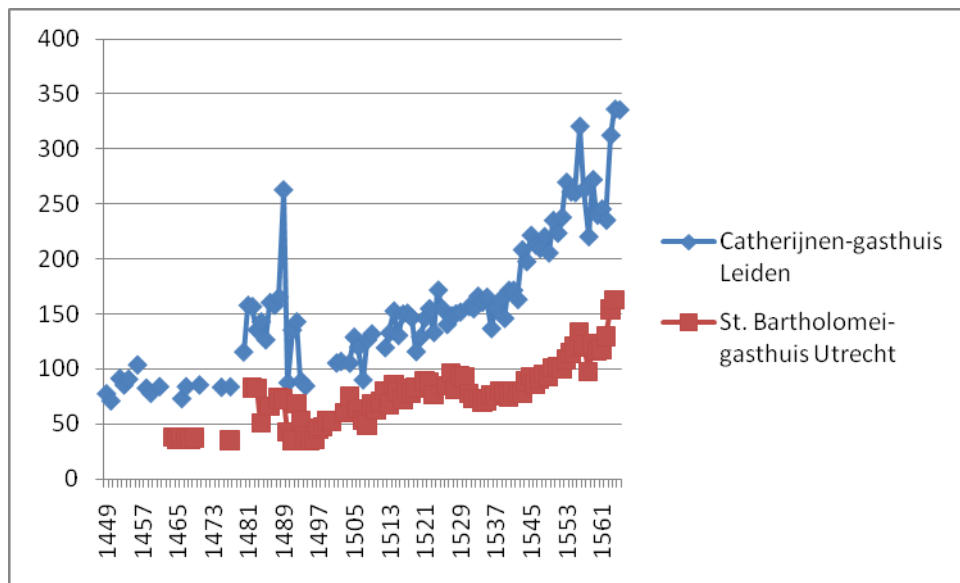
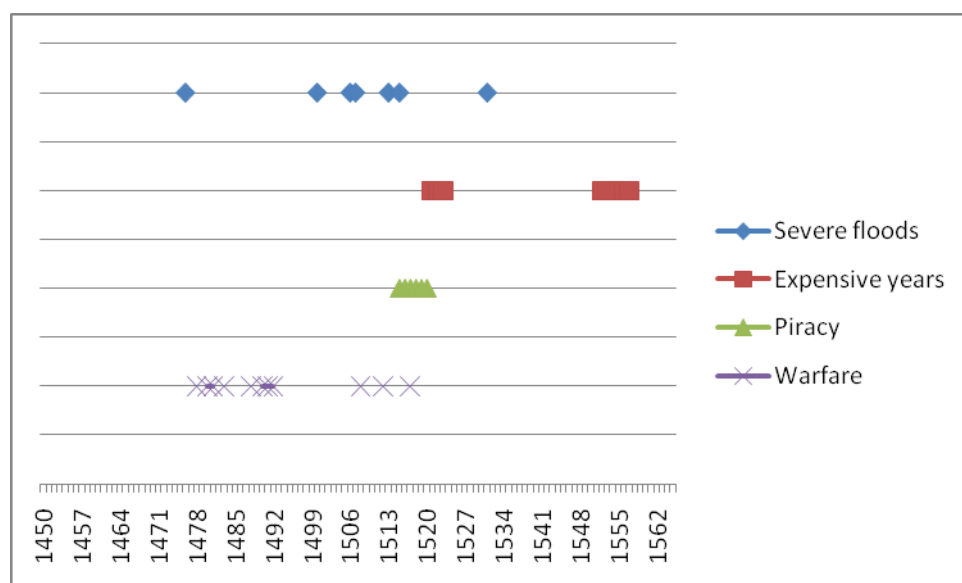


Figure 6: Overview of potentially influential external shocks in Edam, 1450-1565



Sources: figures 2-4. Cf. warfare (including attacks on Amsterdam) and piracy Boschma-Aarnoudse (2003, pp. 173-4, 203, 427-8).

Figure 7: Edam in 1564

Table 4: Average tax assesment in Edam and De Zeevang, in *schotponden*, 1462-1563

Jaar	Cadijck	Catwoud	Coedijck	Edam	Haecxwijck	Kwadijk	Middelie	Oorgat	Volendam	Warder	Total
1462			0.92	1.06	0.79		1.62	0.98	0.33	0.65	1.03
1514	0.76			0.78	0.53		1.04	0.40	0.78		0.76
1546								0.31			0.31
1553								0.30			0.30
1563		0.61		1.01	0.59	0.75	0.95	0.36	0.51	0.58	0.92
Total	0.76	0.61	0.92	0.95	0.61	0.75	1.12	0.45	0.74	0.63	0.88

Table 5: Percentage of population (divided between Oorgat and the rest) that paid a certain amount of schot

Jaar		0-0.99	1-1.99	2-2.99	3 and more	Grand Total
1462	Edam and Zeevang, without Oorgat	64%	22%	6%	8%	100%
1462	Oorgat	59%	33%	5%	3%	100%
Total		63%	23%	6%	8%	100%
1514	Edam and Zeevang, without Oorgat	74%	17%	5%	4%	100%
1514	Oorgat	95%	5%	0%	0%	100%
Total		76%	16%	4%	4%	100%
1546	Oorgat	97%	3%	0%	0%	100%
1553	Oorgat	97%	3%	0%	0%	100%
1563	Edam and Zeevang, without Oorgat	73%	16%	5%	6%	100%
1563	Oorgat	93%	7%	0%	0%	100%
Total		74%	16%	5%	6%	100%
Grand Total		72%	17%	5%	5%	100%

Table 6: Number of households with a particular type of asset and their percentage of the total population with assets (excl. beds), for the Oorgat.

Year	nr. Of households	Cash	Land and lease	House	Cattle	life annuities	redeemable annuities	Scheepsparten	Debt	Fishing equipment
1462	60	29	6	23	50	4	8	3	11	3
1506	41	3	12	14	32	6	5	4	3	0
1514	129	8	42	38	97	14	17	9	18	0
1530	32	4	0	6	29	2	8	0	2	0
1546	27	1	0	7	20	1	4	2	0	0
1553	38	3	0	4	29	2	6	2	1	1
1563	44	1	10	10	25	1	10	4	6	0
Year	nr. Of households	Cash	Land and lease	House	Cattle	life annuities	redeemable annuities	Scheepsparten	Debt	Fishing equipment
1462	60	48%	10%	38%	83%	7%	13%	5%	18%	5%
1506	41	7%	29%	34%	78%	15%	12%	10%	7%	0%
1514	129	6%	33%	29%	75%	11%	13%	7%	14%	0%
1530	32	13%	0%	19%	91%	6%	25%	0%	6%	0%
1546	27	4%	0%	26%	74%	4%	15%	7%	0%	0%
1553	38	8%	0%	11%	76%	5%	16%	5%	3%	3%
1563	44	2%	23%	23%	57%	2%	23%	9%	14%	0%

Table 7: Number of households with a particular type of asset and their percentage of the total population with assets (excl. beds), for the whole of Edam and the Zeevang, except for the Oorgat¹

Year	nr. Of households	Cash	Land and lease	House	Cattle	Life annuities	Redeemable annuities	Scheepsparten	Debt	Fishing equipment
1462	752	381	183	299	554	47	158	175	149	19
1514	867	245	204	301	629	33	233	174	201	18
1563	1248	171	232	230	641	86	607	290	368	30
Year	nr. Of households	Cash	Land and lease	House	Cattle	Life annuities	Redeemable annuities	Scheepsparten	Debt	Fishing equipment
1462	752	51%	24%	40%	74%	6%	21%	23%	20%	3%
1514	867	28%	24%	35%	73%	4%	27%	20%	23%	2%
1563	1248	14%	19%	18%	51%	7%	49%	23%	29%	2%

¹ The following method was followed: per year and per area (Oorgat versus the rest) an analysis was made of the households with at least one asset (other than a bed). Several mentionings of the same kind of asset were not taken into account. Per type of asset, we analyses which percentage of the whole sample had such an asset. This could be as creditor or as debtor, although in the cases of cash and debts it is quite clear that we are taking about respectively creditor and debtor only.

Table 8: Correlation of (returns to) assets

	Real estate	Cattle	Life annuities	Redeemable annuities	Shares in ships	Cash
Real estate	X	+++	---	---	+++	---
Cattle		X	---	---	+++	---
Life annuities			X	+++	0	+++
Redeemable annuities				X	0	+++
Shares in ships					X	0
Cash						X

Table 9: Evolution of the average number of different types of assets households had per year

Year	Edam and Zeevang without Oorgat	The Oorgat
1462	3.613032	2.28
1506		1.93
1514	3.350634	1.81
1530		1.59
1546		1.30
1553		1.26
1563	3.127404	1.52

Table 10: Percentage of households with a specific number of investments in types assets (disregarding the number of investment in one particular type of investment), in Edam and The Zeevang, without the Oorgat

Year	1	2	3	4	5	6	7	Grand Total
1462	8%	22%	30%	25%	10%	5%	0%	100%
1514	11%	31%	27%	18%	10%	2%	1%	100%
1563	17%	29%	27%	15%	8%	2%	1%	100%
Grand Total	13%	28%	28%	19%	9%	3%	1%	100%

Table 11: Percentage of households with a specific number of investments in types assets (disregarding the number of investment in one particular type of investment), in the Oorgat

Year	1	2	3	4	5	7	Grand Total
1462	41%	44%	9%	3%	2%	0%	100%
1506	44%	29%	17%	10%	0%	0%	100%
1514	57%	30%	10%	3%	0%	0%	100%
1530	59%	25%	13%	3%	0%	0%	100%
1546	74%	22%	4%	0%	0%	0%	100%
1553	79%	16%	5%	0%	0%	0%	100%
1563	80%	14%	5%	0%	1%	0%	100%
Grand Total	63%	24%	10%	3%	0%	0%	100%

Table 12: Average amount of guilders per investor in cash and annuities, for Oorgat and Edam

		Contant	Total	Lijfrente		Total	losrente		Total
Year	Location	Crediteur		Crediteur	Debiteur		crediteur	debiteur	
1462	Oorgat	59.65	59.65	84.00		84.00	58.67	52.75	55.29
	The rest	78.01	78.01	94.29	48.73	70.98	83.31	45.28	58.06
	Total	76.76	76.76	93.39	48.73	71.56	81.67	45.62	57.91
1514	Oorgat	28.50	28.50		20.00	20.00	25.67	27.00	26.00
	The rest	119.00	119.00	73.23	57.14	68.11	38.93	46.49	40.54
	Total	118.31	118.31	73.23	54.67	67.04	38.69	46.06	40.26
1530	Oorgat	30.00	30.00						
	Total	30.00	30.00						
1563	Oorgat	120.00	120.00		10.00	10.00	136.57	30.00	104.60
	The rest	355.97	355.97	173.40	147.32	163.21	270.61	100.41	221.40
	Total	354.62	354.62	173.40	143.40	161.47	268.65	99.33	219.66

Remark: the total amounts and averages are calculated per specific year. This calculation was made only on the number of investments, registered for the specified asset. The total amount of households possessing that asset, nor the possibility of individuals possessing different kinds of *renten* has been taken into account.

Figure 9: Evolution of the percentage of the population (with assets) that is involved in a particular type of asset (as creditor or debtor) over time, for Edam and the Zeevang, except for the Oorgat

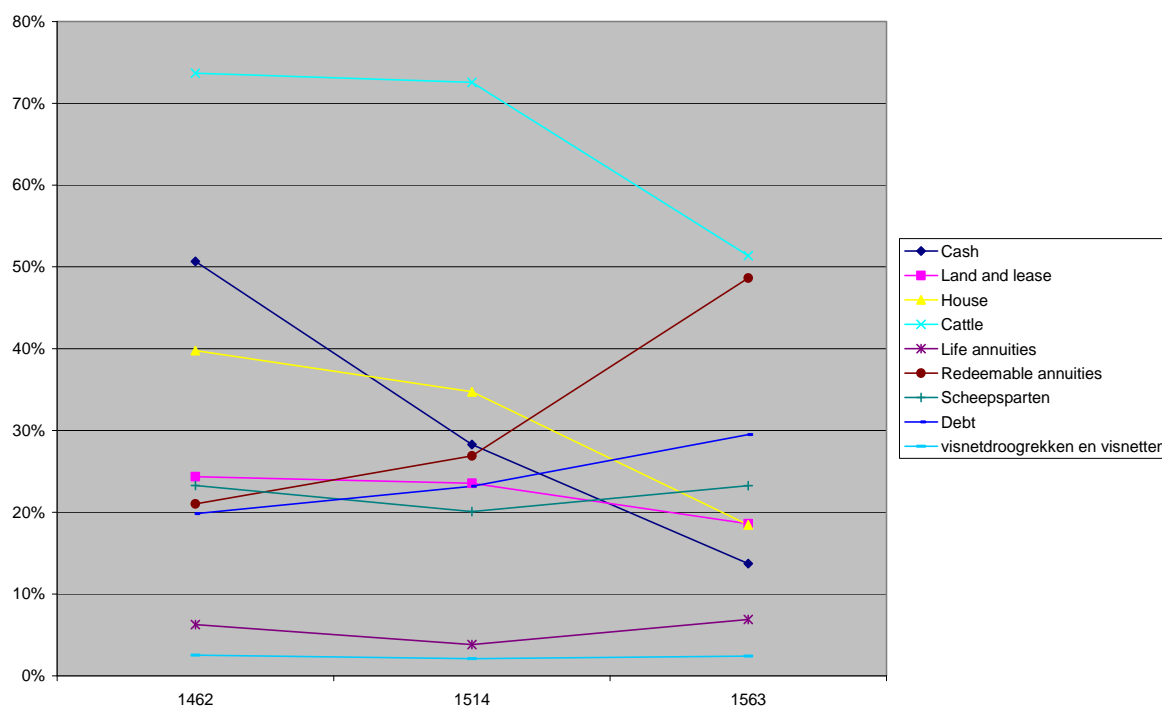


Figure 10: Evolution of the percentage of the population (with assets) that is involved in a particular type of asset (as creditor or debtor) over time, for the Oorgat

