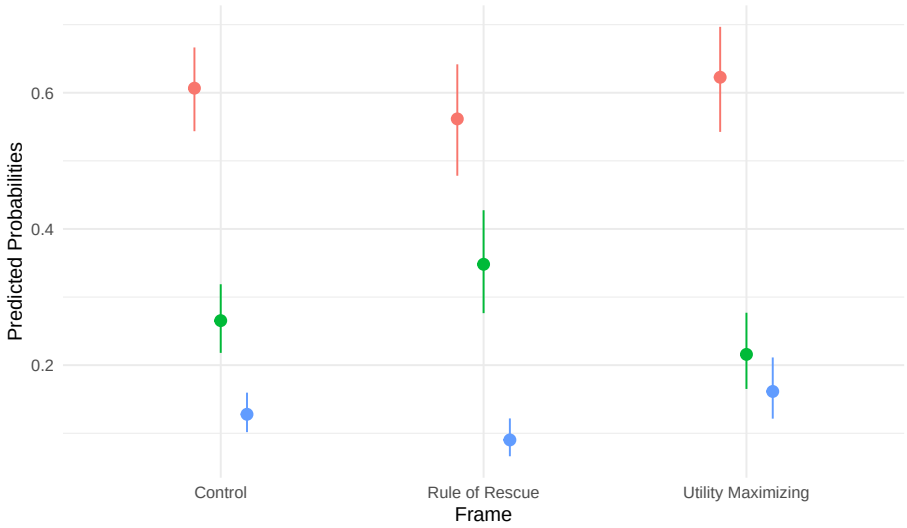
```
## Loading required package:  pacman
```

The new treatment is for a specific type of incurable cancer.
In Finland, there are 10−20 patients each year for
whom a new drug can be used.



A medicine should be introduced at public expense if a company lowers its price
The medicine should be made available at public expense, regardless of the price charged by the company
The medicine should not be introduced with social funding

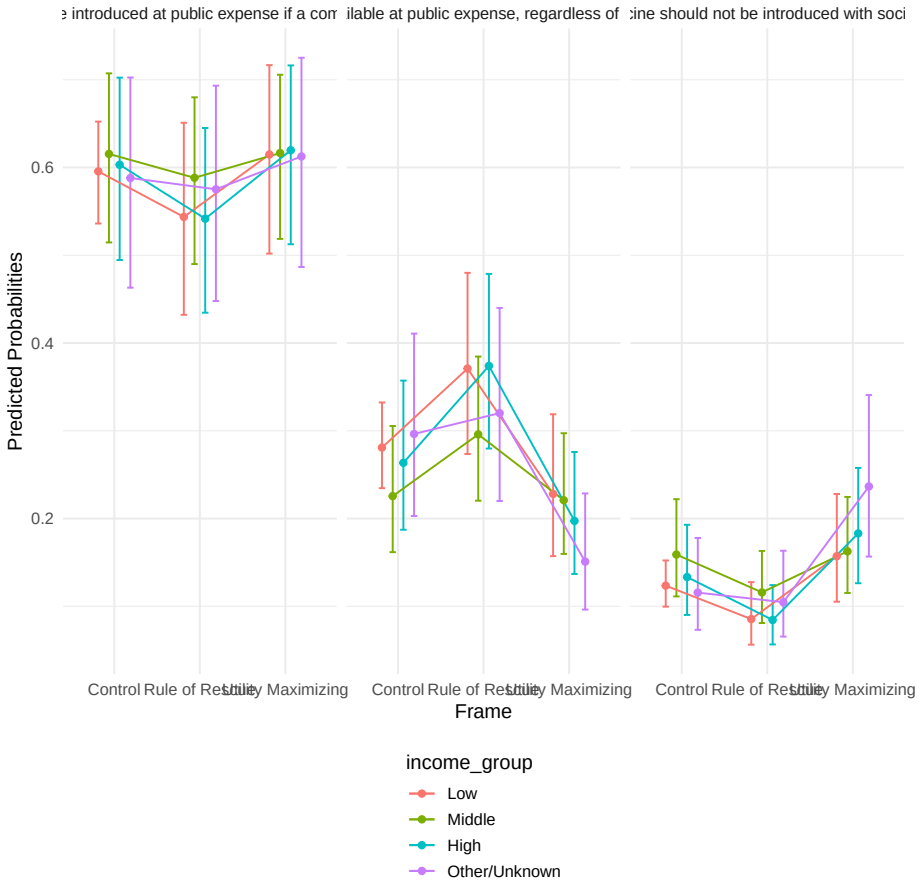
Rule of Rescue:
There is no cure for this particular type of cancer. The new medicine is a possible option for patients who have already received multiple treatments and for whom the remaining options are limited.

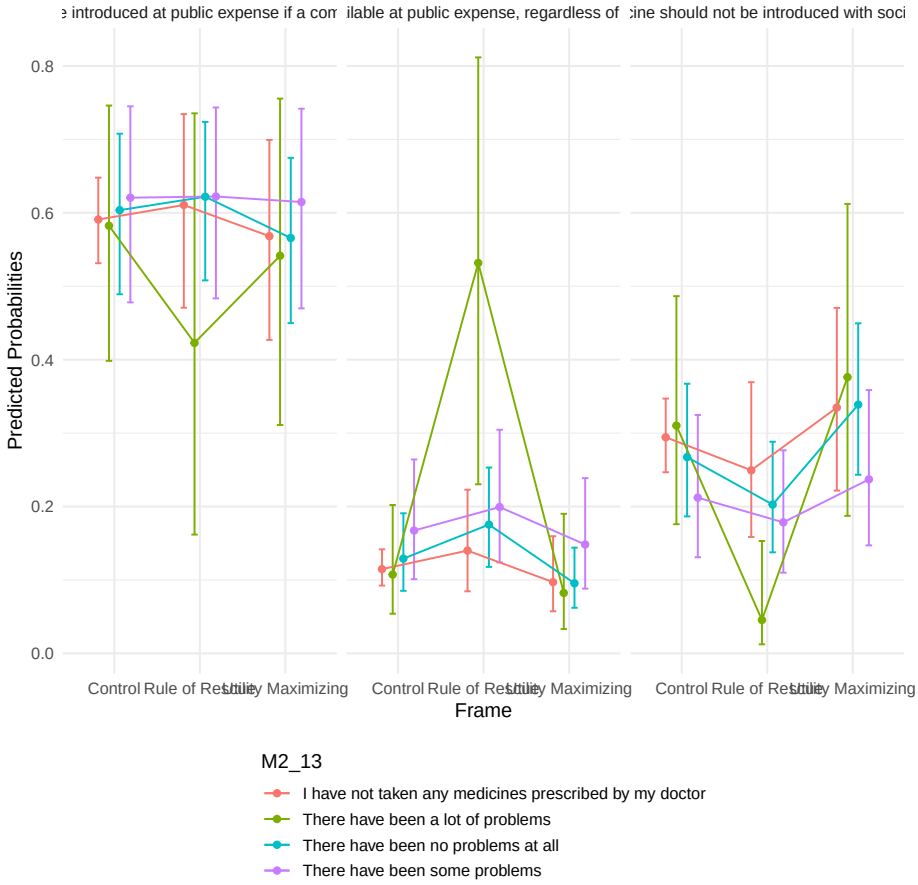
Utility Maximizing:
The funds available to healthcare are finite. The adoption of the new medicine means that the funds used to pay for it will mean cuts elsewhere in healthcare.

```
##        z_score p_value significant
## 90% CI   1.786  0.0742           1
## 95% CI   1.786  0.0742           0

## Fitting m.1:  outcome ~ Frame + M1_1 + M1_2_1 + income_group + M1_9
## Fitting m.2:  outcome ~ Frame + M1_1 + M1_2_1 + income_group + M1_9
+ M2_5
## Fitting m.3:  outcome ~ Frame + M1_1 + M1_2_1 + income_group + M1_9
+ M2_5 + M2_11
## Fitting m.4:  outcome ~ Frame + M1_1 + M1_2_1 + income_group + M1_9
+ M2_5 + M2_11 + M2_6_0
## Fitting m.5:  outcome ~ Frame + M1_1 + M1_2_1 + income_group + M1_9
+ M2_5 + M2_11 + M2_6_0 + M1_3
```

```
## Fitting m.6:  outcome ~ Frame + M1_1 + M1_2_1 + income_group + M1_9
+ M2_5 + M2_11 + M2_6_0 + M1_3 + M2_2
## Fitting m.7:  outcome ~ Frame + M1_1 + M1_2_1 + income_group + M1_9
+ M2_5 + M2_11 + M2_6_0 + M1_3 + M2_2 + M1_5
```






```
p_load(texreg)

# Combine base model and sequential models
all_models <- c(list(model), models)

# Generate the table
texreg(models,
          #omit.coef = "_2_",
          scalebox = 0.3
       )
```

graphicx

	m.0	m.1	m.2	m.3	m.4	m.5	m.6	m.7	m.final
FrameRule of Rescue	0.37***	0.40***	0.40***	0.39***	0.39***	0.39***	0.39***	0.40***	0.40***
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
FrameUtility Maximizing	−0.29**	−0.27**	−0.26**	−0.27**	−0.27**	−0.27**	−0.27**	−0.23*	−0.23*
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
M1_1Male	−0.10	−0.09	−0.10	−0.05	−0.05	−0.04	−0.03	−0.11	−0.11
	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.08)	(0.09)	(0.09)
M1_1Mies	−0.72	−0.77	−0.75	−0.89	−0.90	−1.31	−1.27	−1.25	−1.25
	(1.23)	(1.24)	(1.24)	(1.25)	(1.25)	(1.26)	(1.26)	(1.27)	(1.27)
M1_1Other	−0.01	0.14	0.14	0.12	0.12	0.19	0.22	0.28	0.28
	(0.39)	(0.40)	(0.40)	(0.39)	(0.39)	(0.40)	(0.40)	(0.41)	(0.41)
M1_2_1	0.02***	0.02***	0.02***	0.02***	0.02***	0.01***	0.01***	−0.00	−0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
income_groupMiddle	−0.20	−0.17	−0.17	−0.15	−0.16	−0.09	−0.10	−0.07	−0.07
	(0.10)	(0.11)	(0.11)	(0.11)	(0.11)	(0.12)	(0.12)	(0.12)	(0.12)
income_groupHigh	−0.06	−0.04	−0.04	−0.06	−0.06	0.02	−0.00	0.08	0.08
	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.14)	(0.14)	(0.15)	(0.15)
income_groupOther/Unknown	−0.19	−0.22	−0.22	−0.20	−0.20	−0.13	−0.14	−0.11	−0.11
	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)	(0.15)	(0.15)	(0.15)	(0.15)
The medicine should not be introduced with social funding—A medicine should be introduced at public expense if a company lowers its price	−1.07***	−1.09***	−1.09***	−1.11***	−1.10***	−1.16***	−1.27***	−2.00***	−2.00***
	(0.16)	(0.22)	(0.22)	(0.24)	(0.24)	(0.27)	(0.28)	(0.48)	(0.48)
A medicine should be introduced at public expense if a company lowers its price—The medicine should be made available at public expense, regardless of the price charged by the company	1.82***	1.83***	1.83***	1.83***	1.84***	1.79***	1.68***	1.01*	1.01*
	(0.16)	(0.23)	(0.23)	(0.24)	(0.24)	(0.27)	(0.28)	(0.48)	(0.48)
M1_9Central Ostrobothnia		−0.44	−0.45	−0.51	−0.51	−0.52	−0.51	−0.74*	−0.74*
		(0.35)	(0.35)	(0.36)	(0.36)	(0.36)	(0.36)	(0.37)	(0.37)
M1_9Etelä-Savo		−0.36	−0.36	−0.36	−0.36	−0.41	−0.40	−0.36	−0.36
		(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)
M1_9Kainuu		1.92*	1.93**	2.19**	2.19**	2.26***	2.28***	2.22**	2.22**
		(0.66)	(0.66)	(0.67)	(0.67)	(0.67)	(0.67)	(0.68)	(0.68)
M1_9Kanta-Häme		0.12	0.13	0.10	0.10	0.10	0.10	0.11	0.11
		(0.31)	(0.31)	(0.31)	(0.31)	(0.31)	(0.31)	(0.31)	(0.31)
M1_9Kymenlaakso		−0.23	−0.23	−0.23	−0.23	−0.23	−0.22	0.01	0.01
		(0.29)	(0.29)	(0.29)	(0.29)	(0.29)	(0.29)	(0.29)	(0.29)
M1_9Lapland		−0.23	−0.23	−0.19	−0.19	−0.17	−0.17	−0.07	−0.07
		(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.29)	(0.29)
M1_9North Karelia		−0.37	−0.37	−0.28	−0.28	−0.31	−0.29	−0.26	−0.26
		(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.28)	(0.29)	(0.29)
M1_9North Ostrobothnia		−0.03	−0.03	0.00	0.00	−0.03	−0.05	0.02	0.02
		(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)	(0.23)
M1_9North Savo		−0.32	−0.32	−0.30	−0.30	−0.36	−0.36	−0.37	−0.37
		(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.24)	(0.25)	(0.25)
M1_9Ostrobothnia		−0.31	−0.31	−0.22	−0.22	−0.23	−0.26	−0.26	−0.26
		(0.45)	(0.45)	(0.44)	(0.44)	(0.44)	(0.44)	(0.45)	(0.45)
M1_9Päijät-Häme		0.07	0.06	0.08	0.08	0.07	0.08	0.06	0.06
		(0.26)	(0.26)	(0.26)	(0.26)	(0.26)	(0.26)	(0.27)	(0.27)
M1_9Pirkanmaa		−0.30	−0.30	−0.32	−0.32	−0.31	−0.33	−0.33	−0.33
		(0.20)	(0.20)	(0.20)	(0.20)	(0.20)	(0.20)	(0.21)	(0.21)
M1_9Satakunta		0.10	0.10	0.07	0.07	0.08	0.07	0.09	0.09
		(0.29)	(0.29)	(0.29)	(0.29)	(0.29)	(0.29)	(0.29)	(0.29)
M1_9South Karelia		0.56	0.57	0.53	0.54	0.56	0.59	0.39	0.39
		(0.32)	(0.32)	(0.32)	(0.32)	(0.32)	(0.33)	(0.33)	(0.33)
M1_9South Ostrobothnia		−0.02	−0.01	0.03	0.04	0.09	0.07	0.06	0.06
		(0.29)	(0.29)	(0.30)	(0.30)	(0.30)	(0.30)	(0.30)	(0.30)
M1_9Southwest Finland		−0.06	−0.06	−0.05	−0.05	−0.05	−0.05	−0.01	−0.01
		(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)	(0.21)
M1_9Uusimaa		0.14	0.15	0.16	0.16	0.14	0.13	0.14	0.14
		(0.18)	(0.18)	(0.18)	(0.18)	(0.19)	(0.19)	(0.19)	(0.19)
M2_5Yes			0.03	−0.02	−0.02	−0.02	−0.01	0.01	0.01
			(0.09)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
M2_11300-599 €				−0.02	−0.02	−0.00	0.02	0.06	0.06
				(0.13)	(0.13)	(0.13)	(0.13)	(0.13)	(0.13)
M2_11600 € or more				0.07	0.07	0.10	0.15	0.14	0.14
				(0.17)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)
M2_11All 100 €				0.12	0.11	0.12	0.10	0.13	0.13
				(0.12)	(0.12)	(0.12)	(0.12)	(0.12)	(0.12)
M2_11I do not take medicines prescribed by my doctor				−0.44**	−0.46**	−0.44**	−0.46**	−0.41*	−0.41*
				(0.15)	(0.17)	(0.17)	(0.17)	(0.17)	(0.17)
M2_11I don't know				0.14	0.14	0.16	0.19	0.15	0.15
				(0.18)	(0.18)	(0.18)	(0.18)	(0.18)	(0.18)
M2_6_0Yes					0.03	0.02	−0.04	−0.02	−0.02
					(0.12)	(0.12)	(0.12)	(0.13)	(0.13)
M1_8Separated or divorced						0.47***	0.46**	0.52***	0.52***
						(0.14)	(0.14)	(0.15)	(0.15)
M1_3Unmarried						−0.07	−0.07	−0.09	−0.09
						(0.12)	(0.12)	(0.12)	(0.12)
M1_3Widow						0.21	0.21	0.12	0.12
						(0.29)	(0.29)	(0.29)	(0.29)
M2_2Yes							−0.16	−0.22*	−0.22*
							(0.10)	(0.10)	(0.10)
M1_5I am on maternity or paternity leave, parental leave or childcare leave								−1.82***	−1.82***
								(0.53)	(0.53)
M1_5I am partly working, partly retired								−0.10	−0.10
								(0.48)	(0.48)
M1_5I am retired								0.49	0.49
								(0.39)	(0.39)
M1_5I am unemployed or laid off								0.25	0.25
								(0.41)	(0.41)
M1_5I study								−0.49	−0.49
								(0.41)	(0.41)
M1_5I work full-time								−0.11	−0.11
								(0.38)	(0.38)
M1_5I work part-time								−0.13	−0.13
								(0.42)	(0.42)
M1_5Something else								−0.39	−0.39
								(0.49)	(0.49)
AIC	4568.06	4562.76	4564.65	4558.21	4560.16	4552.26	4551.79	4515.31	4515.31
BIC	4631.95	4725.38	4733.08	4755.68	4763.44	4772.96	4778.29	4788.28	4788.28
Log Likelihood	−2273.03	−2253.38	−2253.32	−2245.11	−2245.08	−2238.13	−2236.89	−2210.65	−2210.65
Deviance	4546.06	4506.76	4506.65	4490.21	4490.16	4476.26	4473.79	4421.31	4421.31
Num. obs.	2460	2460	2460	2460	2460	2460	2460	2460	2460

$^{***}p < 0.001$; $^{**}p < 0.01$; $^{*}p < 0.05$

Table 1: Statistical models

0.1 Prospect Theory (Kahneman & Tversky) predicts that

- Loss frames lead to risk-seeking behavior.
- Gain/neutral frames lead to risk-averse behavior.

0.2 Rule of Rescue Frame = Loss Frame

This frame makes the problem urgent and personal (last-resort cancer drug). According to Prospect Theory:

- People become risk-seeking → more support for the high-cost/high-reward options (i.e., "The medicine should be made available at public expense, regardless of the price charged by the company").
- In the graph: Green bar increases compared to Control and Utility Maximizing frames. In other words, when exposed to "Rule of Rescue" (loss) more respondents turn to risk-seeking behavior, leading to supporting unconditional public funding, even without a price cut.

0.3 Utility Maximizing Frame = Gain Frame

This is a cost-efficiency frame: resources are diverted to other ends. According to Prospect Theory:

- People become risk-averse: prefer lower-cost or no-risk options. Thus, limitless option (green bar) goes down compared to control (but change is non-significant).
- Blue bar (no funding option) goes up: fewer support for unconditional adoption (risky). This is barely significant, however.

0.4 Roadmap

1. Political Psychology - Framing Effects - Public Policy - Prospect Theory
2. Framing a public policy is relevant to gather support in favor of a certain political stance or public policy. They have huge practical consequences.
3. Does the public prefer to maximize utilities or minimize losses? This question is fundamental to practitioners and government agencies in presenting and gathering public support for certain policies. With huge practical consequences not only on the said policy but also on budgetary issues and legitimacy.
4. Traditional approaches predict that "utility-maximizing" approaches should gather more support (efficiency). However, we find that the public rather prefers minimizing losses (than maximizing utilities). (I can write a small section on this difference).

0.5 Sections of the Paper

1. Intro-Motivation: Politics is about who gets what, where and when. Rethoric has been a fundamental aspect of politics (Aristotle). Since resources are scarce and needs are limitless, **(think carefully what the question is)** 'What's an effective way to frame a public policy in welfare state societies'? Other questions: "How do individuals cognitively evaluate public policy trade-offs when exposed to competing rhetorical frames?", "Does the public react more strongly to frames emphasizing losses or those emphasizing efficiency in the context of public policy?", "What shapes citizens' policy preferences when trade-offs are framed in terms of rescue vs. efficiency?" How do ordinary citizens reason about trade-offs in health policy when exposed to competing frames grounded in loss avoidance versus utility maximization? This question speaks to foundational theories in political psychology and behavioral decision-making.

2. Literature on framing and public policy (Mikko/Katri section).

3. Our contribution is to introduce prospect theory from a political psychology perspective to the literature on framing effects and public policy. (I can write the prospect theory part). **Tactical aspects**: I would exploit prospect theory, but maybe without saying "prospect theory." Thus, the contribution is really about shifting the focus to a framework of gains, to a framework of minimizing losses. I.e., I'd like to use the prospect theory apparatus and language, but for tactical reasons, maybe not say this IS a paper ABOUT prospect theory.

4. Methods; experimental design. (I can write this. Maybe you guys can describe the procedures first? And then I write the econometric analyses and interpretation in light of of the losses theory we're proposing? Maybe good idea there is a link of our results in light of the public policy research too, which I don't know—like, how our results complement or not with the rest of the pub pol literature/findings).