



Survival Chances of Newly Founded Businesses in West- and East- Germany – a Comparison

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Institute of Sociology
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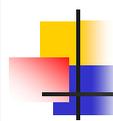
Research Question:

Are there differences in the chances of survival between newly founded businesses in East (Leipzig) and West (Upper Bavaria) and how may they be explained?



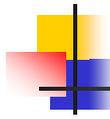
Survival of Newly Founded Businesses in West- and East Germany – a Comparison

- **The Database**



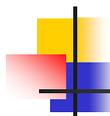
Survival of Newly Founded Businesses in West- and East Germany – a Comparison

- **The Database**
- **Gross Comparison of East and West**



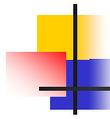
Survival of Newly Founded Businesses in West- and East Germany – a Comparison

- The Database
- Gross Comparison of East and West
- **The Baseline Model of Survival**



Survival of Newly Founded Businesses in West- and East Germany – a Comparison

- The Database
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- **A First Account of the Differences**



Survival of Newly Founded Businesses in West- and East Germany – a Comparison

- The Database
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- **Some Further Explanations**



Survival of Newly Founded Businesses in West- and East Germany – a Comparison

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- Some Further Explanations
- **Summary and Conclusions**

Munich and Leipzig Founder Studies

Region	Chamber of Commerce (IHK) of Munich and Upper Bavaria	Chamber of Commerce (IHK) Leipzig

Munich and Leipzig Founder Studies

Region	Chamber of Commerce (IHK) of Munich and Upper Bavaria	Chamber of Commerce (IHK) Leipzig
Founding Cohort	1985 and 1986 N = 28.646	1991 N = 3.416

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Panel design	Retrospective	Prospective

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Munich and Leipzig Founder Studies

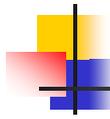
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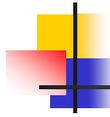
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Financing	Deutsche Forschungsgemeinschaft IHK Munich and Upper Bavaria	Deutsche Forschungsgemeinschaft IHK Leipzig



Gross East-West Differences in Survival Chances

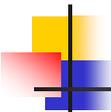
- **Dependent Variable in Logistic Regression:
Chances of Surviving at least 36 months**



Covariates in Logistic Regression Analysis of Survival Chances

- **Leipzig vs. Munich**

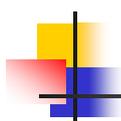
Chances of Surviving 36 Months (Logistic Regression)				
	Gross Differences		Baseline Model	
	exp(B)	(sig.)	exp(B)	(sig.)
Leipzig (reference category: Munich)	1.09	(.451)		
years of schooling			1.08	(.000)
years of work experience			1.02	(.001)
industry-specific experience			1.49	(.000)
self-employment experience			.84	(.170)
leadership experience			1.47	(.049)
leadership experience × number of employees			.65	(.018)
constant	2.45	(.000)	.19	(.000)



Covariates in Logistic Regression Analysis of Survival Chances

- Leipzig vs. Munich
- Human Capital Theory: Resources of Founder
- **Organizational Ecology: Firm Characteristics**

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follower vs. newcomer business			1.29	(.081)
amount of capital invested (natural log)			1.05	(.002)
number of employees (natural log)			1.37	(.004)
legal form (small tradesman)			3.06	(.000)
constant	2.45	(.000)	.19	(.000)

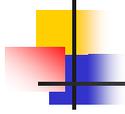


Covariates in Logistic Regression Analysis of Survival Chances

- Leipzig vs. Munich
- Human Capital Theory: Resources of Founder
- Organizational Ecology: Firm Characteristics
- **Environmental Conditions: Branch of Industry**

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legal form (small tradesman)			3.06	(.000)
branch of industry (reference category: retail)				(.000)
manufacturing			3.51	(.000)
construction			2.52	(.006)
wholesale			1.09	(.587)
transportation			.71	(.092)
insurance			1.08	(.734)
restaurant			.90	(.637)
person related services			1.07	(.746)
firm related services			1.42	(.074)

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N			2157	
Maximum Likelihood Estimates	998		913	



Question 2:

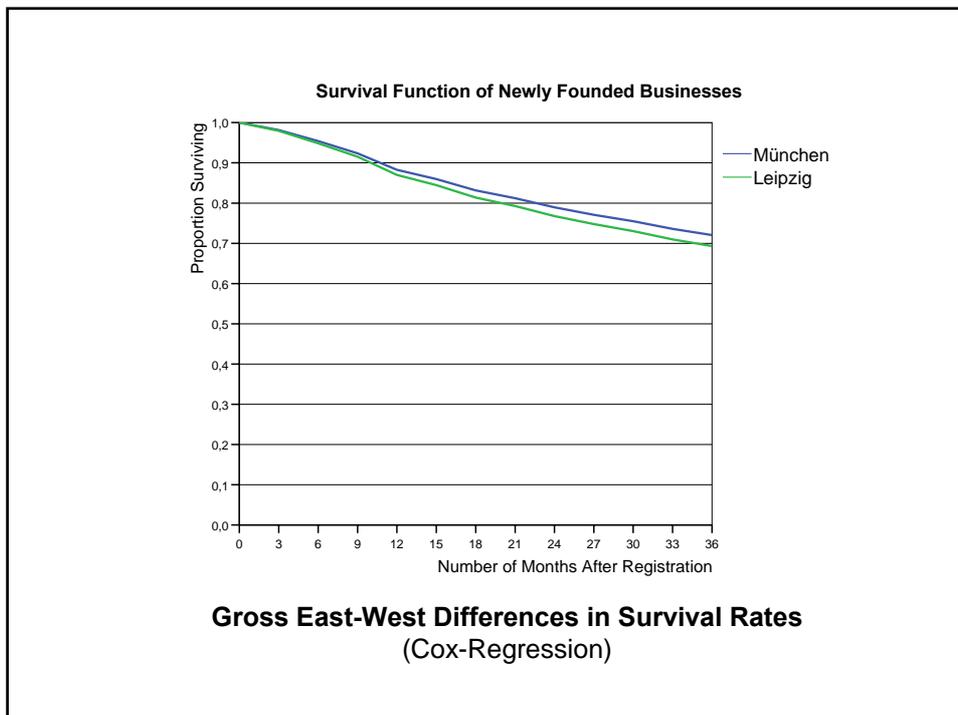
Are there Differences in the Effects of Covariates between Leipzig and Munich?

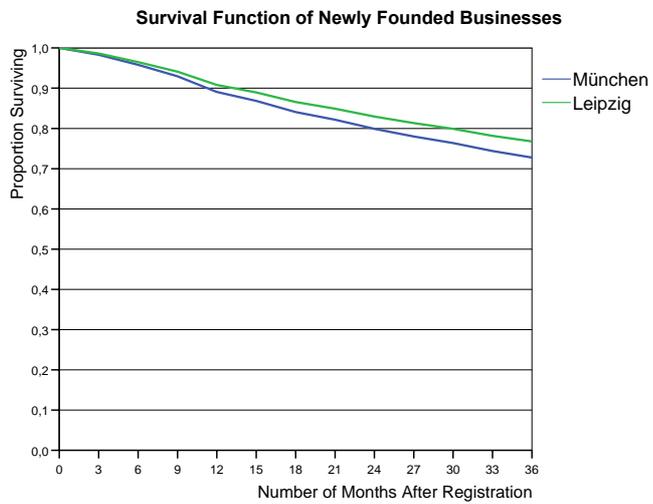
Chances of Surviving 36 Months (Logistic Regression)						
	Gross Differences		Baseline Model		Baseline Model with Interaction	
	exp(B)	(sig.)	exp(B)	(sig.)	exp(B)	(sig.)
Leipzig (reference category: Munich)	1.09	(.451)	1.29	(.075)		
years of schooling			1.08	(.000)	1.09	(.000)
years of work experience			1.02	(.001)	1.02	(.001)
industry-specific experience			1.49	(.000)	1.78	(.000)
industry-specific experience × Leipzig					.46	(.002)
self-employment experience			.84	(.170)	.82	(.125)
leadership experience			1.47	(.049)	1.61	(.023)
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follower vs. newcomer business			1.29	(.081)	1.32	(.064)
amount of capital invested (natural log)			1.05	(.002)	1.05	(.003)
number of employees (natural log)			1.37	(.004)	1.58	(.000)
number of employees (natural log) × Leipzig					.66	(.013)
legal form (small tradesman)			3.06	(.000)	2.91	(.000)
branch of industry (reference category: retail)				(.000)		
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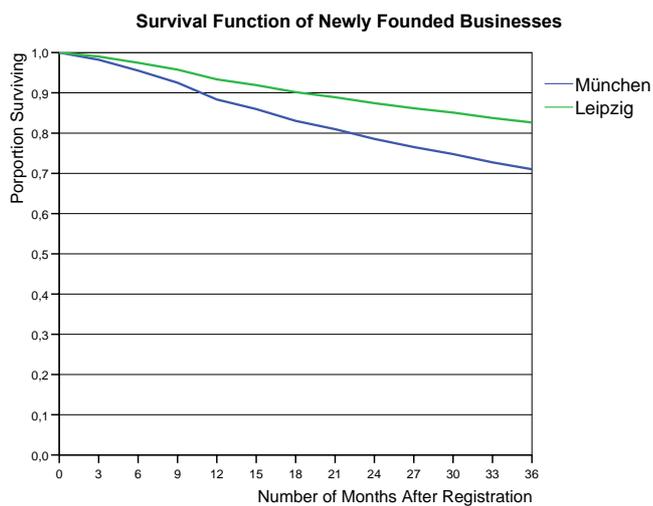
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branch of industry (reference category: retail)				(.000)		(.000)
manufacturing			3.51	(.000)	3.54	(.000)
construction			2.52	(.006)	2.56	(.005)
wholesale			1.09	(.587)	1.08	(.665)
transportation			.71	(.092)	.71	(.094)
insurance			1.08	(.734)	1.05	(.828)
restaurant			.90	(.637)	.84	(.432)
person related services			1.07	(.746)	1.05	(.819)

Chances of Surviving 36 Months (Logistic Regression)						
	Gross Differences		Baseline Model		Baseline Model with Interaction	
	exp(B)	(sig.)	exp(B)	(sig.)	exp(B)	(sig.)
Leipzig (reference category: Munich)	1.09	(.451)	1.29	(.075)	2.40	(.000)
years of schooling			1.08	(.000)	1.09	(.000)
years of work experience			1.02	(.001)	1.02	(.001)
industry-specific experience			1.49	(.000)	1.78	(.000)
industry-specific experience × Leipzig					.46	(.002)
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restaurant			.90	(.637)	.84	(.432)
person related services			1.07	(.746)	1.05	(.819)
firm related services			1.42	(.074)	1.42	(.073)
constant	2.45	(.000)	.19	(.000)	.16	(.000)
N	2157					





**East-West Differences in Survival Rates of Baseline Model
(Cox-Regression)**



**East-West Differences in Survival Rates
of Baseline Model with Interaction Effects
(Cox-Regression)**



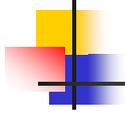
Question 3:

How may the seemingly better conditions of Leipzig (after controlling for the covariates in the baseline model) be explained?



Conjecture 1:

Many more firms in Leipzig have received special funding by government programs than in Upper Bavaria



Conjecture 1:

Many more firms in Leipzig have received special funding by government programs than in Upper Bavaria

Munich: 3,2% Leipzig: 23,1%

Chances of Surviving 36 Months (Logistic Regression)

Type of Model	exp(B) Leipzig vs. Munich	sign.
Gross Differences	1.09	(.451)

Chances of Surviving 36 Months (Logistic Regression)

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Baseline Model	1.29	(.075)

Chances of Surviving 36 Months (Logistic Regression)

Type of Model	exp(B) Leipzig vs. Munich	sign.
Gross Differences	1.09	(.451)
Baseline Model	1.29	(.075)
Baseline Model with Interaction Effects	2.40	(.000)

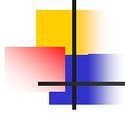
Chances of Surviving 36 Months (Logistic Regression)

Type of Model	exp(B) Leipzig vs. Munich	sign.
Gross Differences	1.09	(.451)
Baseline Model	1.29	(.075)
Baseline Model with Interaction Effects	2.40	(.000)
Public Funding exp(B) = 1.82 (.016)	2.20	(.000)



Conjecture 2:

Markets in Leipzig have more expansive potential



Conjecture 2:

Markets in Leipzig have more expansive potential

A tentative test: Interaction effects of classification of branches

Chances of Surviving 36 Months (Logistic Regression)

Interaction Effects of Leipzig with	exp(B)	sign.
manufacturing	.20	(.026)
construction	.24	(.085)
wholesale	2.10	(.095)
transportation	1.22	(.666)
insurance	2.00	(.144)
restaurant	1.71	(.272)
person related services	.48	(.090)
firm related services	1.96	(.211)

Chances of Surviving 36 Months (Logistic Regression)

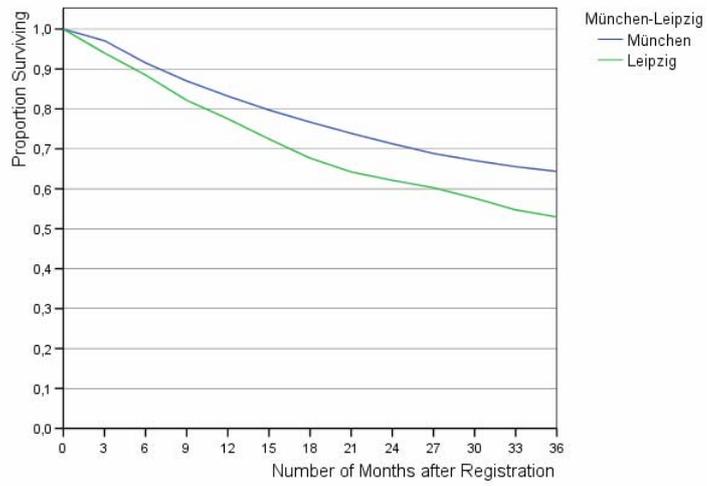
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Public Funding exp(B) = 1.82 (.016)	2.20	(.000)
Interaction Effects of Branches	1.86	(.017)



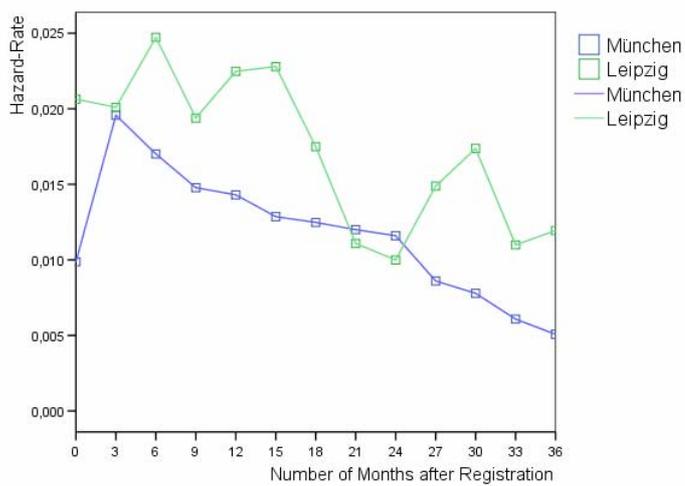
Conjecture 3:

Selection pressures in the beginning are higher in Leipzig than in Upper Bavaria, i.e. in Leipzig “unfit” foundings quit earlier

Survival Function of Founding Cohorts (Munich=30157; Leipzig=3381)



Hazard-Function of Founding Cohorts (Munich=30157; Leipzig=3381)

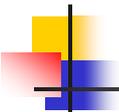




Conjecture 3:

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A tentative test: Differences in percentage of non-surviving enterprises after 12 months within the registration data



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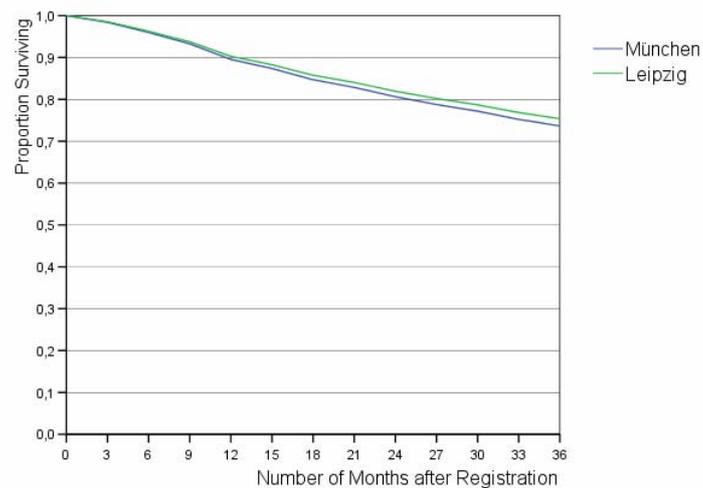
A tentative test: Differences in percentage of non-surviving enterprises after 12 months within the registration data

Trade:	7,95 %
Manufacturing:	1,99 %
Services:	5,67 %

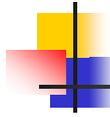
Chances of Surviving 36 Months (Logistic Regression)

Type of Model	exp(B) Leipzig vs. Munich	sign.
Gross Differences	1.09	(.451)
Baseline Model	1.29	(.075)
Baseline Model with Interaction Effects	2.40	(.000)
Public Funding exp(B)=1.82 (.016)	2.20	(.000)
Interaction Effects of Branches	1.86	(.017)
Selection Pressure exp(B)=1.16 (.079)	.81	(.719)

Survival Function of Newly Founded Businesses



East-West Differences in Survival Rates of Baseline Model with Interaction Effects, Public Funding and Selection Pressure (Cox-Regression)



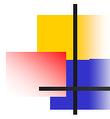
Summary and Conclusions

- There are no significant gross differences in survival rates between Leipzig and Munich



Summary and Conclusions

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- The effects of human capital and organizational size are very similar



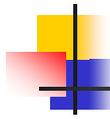
Summary and Conclusions

- There are no significant gross differences in survival rates between Leipzig and Munich
- The effects of human capital and organizational size are very similar
- The Leipzig firms have less resources than the enterprises in Upper Bavaria and some of the factors (industry-specific or leadership experience and number of employees) have lower positive effects



Summary and Conclusions

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- The effects of human capital and organizational size are very similar
- The Leipzig firms have less resources than the enterprises in Upper Bavaria and some of the factors (industry-specific or leadership experience and number of employees) have lower positive effects
- After controlling for this disadvantage the Leipzig firms show a higher proportion of surviving firms



Summary and Conclusions

- There are no significant gross differences in survival rates between Leipzig and Munich
- The effects of human capital and organizational size are very similar
- The Leipzig firms have less resources than the enterprises in Upper Bavaria and some of the factors (industry-specific or leadership experience and number of employees) have lower positive effects
- After controlling for this disadvantage the Leipzig firms show a higher proportion of surviving firms
- This seemingly better performance seems to be due to higher public funding and early selection of "unfit" foundings

München



Leipzig

