

# Government Finance and Imposition of Serfdom after the Black Death

## Supplemental Information

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## Additional statistics mentioned in the text

Table A1: Explanations for *Level* of Serfdom

	NAs Dropped		NAs=0	
	(1)	(2)	(3)	(4)
	Small States=3	Small States=0	Small States=3	Small States=0
Executive Constraints	1.09* (0.54)	1.09* (0.54)	1.00* (0.48)	1.00* (0.48)
Protection of Capital	-0.79 <sup>+</sup> (0.40)	-0.79 <sup>+</sup> (0.40)	-0.74* (0.35)	-0.74* (0.35)
Overseas Income	-0.54 (0.40)	-0.54 (0.40)	-0.49 (0.31)	-0.49 (0.31)
% Protestant Cities	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
% Muslim Cities	0.16*** (0.02)	0.16*** (0.02)	0.17*** (0.01)	0.17*** (0.01)
Parliament	-1.33 (0.89)	-1.33 (0.89)	-1.13 (0.70)	-1.13 (0.70)
# Meetings of Parliament	-0.12 (0.07)	-0.12 (0.07)	-0.10 (0.07)	-0.10 (0.07)
Population in Cities (100,000s)	-0.32** (0.12)	-0.32** (0.12)	-0.33** (0.12)	-0.33** (0.12)
year=1500	0.36 (0.23)	0.36 (0.23)	0.27 (0.17)	0.27 (0.17)
year=1600	1.32* (0.62)	1.32* (0.62)	0.99* (0.48)	0.99* (0.48)
year=1700	1.20 <sup>+</sup> (0.68)	1.20 <sup>+</sup> (0.68)	0.91 <sup>+</sup> (0.53)	0.91 <sup>+</sup> (0.53)
year=1800	0.38 (0.49)	0.38 (0.49)	0.28 (0.39)	0.28 (0.39)
Constant	1.02 (0.62)	0.66 (0.62)	0.59 (0.51)	0.32 (0.51)
Observations	201	201	261	261
R <sup>2</sup>	0.41	0.41	0.39	0.39

Notes: See text for description of variables. Clustered standard errors by polity in parentheses. <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A2: Explanations for *Level* of Serfdom, Robust Standard Errors

	NAs Dropped		NAs=0	
	(1) Small States=3	(2) Small States=0	(3) Small States=3	(4) Small States=0
Executive Constraints	1.09* (0.54)	1.09* (0.54)	1.00* (0.48)	1.00* (0.48)
Protection of Capital	-0.79+ (0.40)	-0.79+ (0.40)	-0.74* (0.35)	-0.74* (0.35)
Overseas Income	-0.54 (0.40)	-0.54 (0.40)	-0.49 (0.31)	-0.49 (0.31)
% Protestant Cities	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
% Muslim Cities	0.16*** (0.02)	0.16*** (0.02)	0.17*** (0.01)	0.17*** (0.01)
Parliament	-1.33 (0.89)	-1.33 (0.89)	-1.13 (0.70)	-1.13 (0.70)
# Meetings of Parliament	-0.12 (0.07)	-0.12 (0.07)	-0.10 (0.07)	-0.10 (0.07)
Population in Cities (100,000s)	-0.32** (0.12)	-0.32** (0.12)	-0.33** (0.12)	-0.33** (0.12)
year=1500	0.36 (0.23)	0.36 (0.23)	0.27 (0.17)	0.27 (0.17)
year=1600	1.32* (0.62)	1.32* (0.62)	0.99* (0.48)	0.99* (0.48)
year=1700	1.20+ (0.68)	1.20+ (0.68)	0.91+ (0.53)	0.91+ (0.53)
year=1800	0.38 (0.49)	0.38 (0.49)	0.28 (0.39)	0.28 (0.39)
Constant	1.02 (0.62)	0.66 (0.62)	0.59 (0.51)	0.32 (0.51)
Observations	201	201	261	261
R <sup>2</sup>	0.41	0.41	0.39	0.39

Notes: See text for description of variables. Robust standard errors in parentheses. +  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A3: Explanations for *Level* of Serfdom, Number of Cities instead of City Population

	NAs Dropped		NAs=0	
	(1) Small States=3	(2) Small States=0	(3) Small States=3	(4) Small States=0
Executive Constraints	1.11* (0.55)	1.11* (0.55)	1.01* (0.49)	1.01* (0.49)
Protection of Capital	-0.84* (0.42)	-0.84* (0.42)	-0.78* (0.36)	-0.78* (0.36)
Overseas Income	-0.61 (0.43)	-0.61 (0.43)	-0.57 <sup>+</sup> (0.34)	-0.57 <sup>+</sup> (0.34)
% Protestant Cities	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
% Muslim Cities	0.16*** (0.02)	0.16*** (0.02)	0.17*** (0.01)	0.17*** (0.01)
Parliament	-1.31 (0.87)	-1.31 (0.87)	-1.14 <sup>+</sup> (0.67)	-1.14 <sup>+</sup> (0.67)
# Meetings of Parliament	-0.12 (0.07)	-0.12 (0.07)	-0.10 (0.07)	-0.10 (0.07)
# Cities	-0.29 (0.20)	-0.29 (0.20)	-0.30 (0.22)	-0.30 (0.22)
year=1500	0.36 (0.24)	0.36 (0.24)	0.27 (0.17)	0.27 (0.17)
year=1600	1.24* (0.60)	1.24* (0.60)	0.93 <sup>+</sup> (0.47)	0.93 <sup>+</sup> (0.47)
year=1700	1.12 <sup>+</sup> (0.67)	1.12 <sup>+</sup> (0.67)	0.84 (0.51)	0.84 (0.51)
year=1800	0.22 (0.45)	0.22 (0.45)	0.14 (0.36)	0.14 (0.36)
Constant	1.06 <sup>+</sup> (0.63)	0.70 (0.63)	0.66 (0.51)	0.38 (0.51)
Observations	201	201	261	261
R <sup>2</sup>	0.41	0.41	0.38	0.38

Notes: See text for description of variables. Clustered standard errors by polity in parentheses. <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A4: Explanations for *Level* of Serfdom, Interaction with Credit Crunches

	NAs Dropped		NAs=0	
	(1) Small States=3	(2) Small States=0	(3) Small States=3	(4) Small States=0
Executive Constraints	0.79 <sup>+</sup> (0.45)	0.79 <sup>+</sup> (0.45)	0.67 <sup>+</sup> (0.36)	0.67 <sup>+</sup> (0.36)
Protection of Capital	-0.49 (0.54)	-0.49 (0.54)	-0.39 (0.33)	-0.39 (0.33)
Overseas Income	-0.24 (0.44)	-0.24 (0.44)	-0.26 (0.33)	-0.26 (0.33)
% Protestant Cities	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
% Muslim Cities	0.16*** (0.02)	0.16*** (0.02)	0.16*** (0.01)	0.16*** (0.01)
Parliament	-1.51 <sup>+</sup> (0.77)	-1.51 <sup>+</sup> (0.77)	-1.24* (0.62)	-1.24* (0.62)
# Meetings of Parliament	0.02 (0.07)	0.02 (0.07)	0.03 (0.06)	0.03 (0.06)
Population in Cities (100,000s)	-0.25 <sup>+</sup> (0.14)	-0.25 <sup>+</sup> (0.14)	-0.27 <sup>+</sup> (0.14)	-0.27 <sup>+</sup> (0.14)
year=1400	0.00 (.)	0.00 (.)	0.00 (.)	0.00 (.)
year=1500	-0.04 (0.36)	-0.04 (0.36)	-0.03 (0.35)	-0.03 (0.35)
year=1600	0.64 (0.85)	0.64 (0.85)	0.59 (0.66)	0.59 (0.66)
year=1700	1.93 (1.33)	1.93 (1.33)	1.62 <sup>+</sup> (0.98)	1.62 <sup>+</sup> (0.98)
year=1800	-0.25 (0.63)	-0.25 (0.63)	-0.05 (0.46)	-0.05 (0.46)
year=1500 × Executive Constraints	0.66 <sup>+</sup> (0.36)	0.66 <sup>+</sup> (0.36)	0.47 (0.32)	0.47 (0.32)
year=1600 × Executive Constraints	2.52*** (0.44)	2.52*** (0.44)	2.49*** (0.30)	2.49*** (0.30)
year=1700 × Executive Constraints	-0.40 (0.52)	-0.40 (0.52)	-0.35 (0.46)	-0.35 (0.46)
year=1800 × Executive Constraints	0.62 (0.96)	0.62 (0.96)	0.38 (0.66)	0.38 (0.66)
year=1500 × Protection of Capital	-0.58 <sup>+</sup> (0.34)	-0.58 <sup>+</sup> (0.34)	-0.42 (0.26)	-0.42 (0.26)
year=1600 × Protection of Capital	-2.63*** (0.42)	-2.63*** (0.42)	-2.63*** (0.33)	-2.63*** (0.33)
year=1700 × Protection of Capital	-0.63 (0.85)	-0.63 (0.85)	-0.55 (0.74)	-0.55 (0.74)
year=1800 × Protection of Capital	-0.52 (1.03)	-0.52 (1.03)	-0.38 (0.68)	-0.38 (0.68)
Constant	1.20 <sup>+</sup> (0.64)	0.84 (0.64)	0.71 (0.56)	0.43 (0.56)
Observations	201	201	261	261
R <sup>2</sup>	0.56	0.56	0.55	0.55
bottomrule				

Notes: See text for description of variables. Credit crunches happened in 1500 and 1600. Clustered standard errors by polity in parentheses. <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A5: Explanations for *Level* of Serfdom, Dropping Hungary and Habsburg

	NAs Dropped		NAs=0	
	(1) Small States=3	(2) Small States=0	(3) Small States=3	(4) Small States=0
Executive Constraints	0.67 (0.69)	0.67 (0.69)	0.64 <sup>+</sup> (0.37)	0.64 (0.59)
Protection of Capital	-0.46 (0.50)	-0.46 (0.50)	-0.44 <sup>+</sup> (0.24)	-0.44 (0.38)
Overseas Income	-0.68 (0.70)	-0.68 (0.70)	-0.60 <sup>+</sup> (0.34)	-0.60 (0.54)
% Protestant Cities	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
% Muslim Cities	0.01*** (0.00)	0.04*** (0.00)		0.01 (0.01)
Parliament	-0.89 (1.38)	-0.89 (1.38)	-0.65 (0.61)	-0.65 (0.96)
# Meetings of Parliament	-0.13 (0.12)	-0.13 (0.12)	-0.11 (0.07)	-0.11 (0.11)
Population in Cities (100,000s)	-0.30 (0.24)	-0.30 (0.24)	-0.32* (0.15)	-0.32 (0.24)
year=1400	-0.17 (0.76)	-0.17 (0.76)	-0.22 (0.17)	-0.09 (0.57)
year=1500	0.13 (0.58)	0.13 (0.58)		0.13 (0.45)
year=1600	0.86 (0.62)	0.86 (0.62)	0.53 (0.42)	0.66 (0.47)
year=1700	0.84 (0.77)	0.84 (0.77)	0.51 (0.49)	0.64 (0.57)
Observations	195	195	255	255
R <sup>2</sup>	0.20	0.20	0.17	0.17

Notes: See text for description of variables. Clustered standard errors by polity in parentheses. <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$



Table A6: Explanations for *Level* of Serfdom, Ordered Probit

	NAs Dropped		NAs=0	
	(1) Small States=3	(2) Small States=0	(3) Small States=3	(4) Small States=0
main				
Executive Constraints	0.61** (0.19)	0.64** (0.19)	0.59** (0.18)	0.66*** (0.19)
Protection of Capital	-0.97*** (0.21)	-0.87*** (0.21)	-1.07*** (0.21)	-0.96*** (0.21)
Overseas Income	-0.37 (0.31)	-0.24 (0.26)	-0.19 (0.31)	-0.09 (0.27)
% Protestant Cities	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
% Muslim Cities	0.02* (0.01)	0.02** (0.01)	0.01 <sup>+</sup> (0.01)	0.02** (0.01)
Parliament	-0.08 (0.32)	0.75* (0.33)	0.18 (0.30)	0.92** (0.31)
# Meetings of Parliament	0.01 (0.05)	0.00 (0.05)	0.02 (0.05)	0.01 (0.05)
Population in Cities (100,000s)	0.27 <sup>+</sup> (0.15)	0.21 <sup>+</sup> (0.12)	0.38* (0.15)	0.30** (0.12)
year=1400	-0.06 (0.36)	0.08 (0.51)	0.28 (0.33)	0.34 (0.47)
year=1500	0.39 (0.36)	0.41 (0.52)	0.75* (0.32)	0.70 (0.47)
year=1600	0.72* (0.31)	0.90 <sup>+</sup> (0.48)	0.74** (0.27)	0.95* (0.45)
year=1700	0.77* (0.35)	0.96 <sup>+</sup> (0.50)	0.68* (0.30)	0.93* (0.46)
Observations	201	201	261	261
R <sup>2</sup>				

Notes: See text for description of variables. Clustered standard errors by polity in parentheses. <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A7: Explanations for Dichotomous Variable for Serfdom

	NAs Dropped		NAs=0	
	(1)	(2)	(3)	(4)
	Small States=3	Small States=0	Small States=3	Small States=0
Executive Constraints	0.20*	0.20*	0.20*	0.20*
	(0.10)	(0.10)	(0.10)	(0.10)
Protection of Capital	-0.21*	-0.21*	-0.19*	-0.19*
	(0.09)	(0.09)	(0.09)	(0.09)
Overseas Income	-0.07	-0.07	-0.06	-0.06
	(0.11)	(0.11)	(0.11)	(0.11)
% Protestant Cities	-0.00	-0.00	-0.00	-0.00
	(0.00)	(0.00)	(0.00)	(0.00)
% Muslim Cities	0.03***	0.03***	0.03***	0.03***
	(0.00)	(0.00)	(0.00)	(0.00)
Parliament	-0.37	-0.37	-0.48*	-0.48*
	(0.24)	(0.24)	(0.21)	(0.21)
# Meetings of Parliament	-0.00	-0.00	-0.00	-0.00
	(0.01)	(0.01)	(0.01)	(0.01)
Population in Cities (100,000s)	-0.15 <sup>+</sup>	-0.15 <sup>+</sup>	-0.15*	-0.15*
	(0.08)	(0.08)	(0.08)	(0.08)
year=1500	0.07 <sup>+</sup>	0.07 <sup>+</sup>	0.05	0.05
	(0.04)	(0.04)	(0.04)	(0.04)
year=1600	0.17	0.17	0.14	0.14
	(0.11)	(0.11)	(0.11)	(0.11)
year=1700	0.14	0.14	0.10	0.10
	(0.13)	(0.13)	(0.13)	(0.13)
year=1800	-0.05	-0.05	-0.08	-0.08
	(0.12)	(0.12)	(0.11)	(0.11)
Constant	0.66***	0.56***	0.46**	0.36*
	(0.16)	(0.16)	(0.15)	(0.15)
Observations	261	261	261	261
R <sup>2</sup>	0.35	0.35	0.36	0.36

Notes: DV takes value 0 if no serfdom law is in effect and 1 if any serfdom law is in effect. See text for description of variables. Clustered standard errors by polity in parentheses. <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A8: Explanations for *Level* of Serfdom, Including the Proportion of Communes

	NAs Dropped		NAs=0	
	(1)	(2)	(3)	(4)
	Small States=3	Small States=0	Small States=3	Small States=0
$\Delta$ Executive Constraints	5.40** (2.01)	5.68*** (1.55)	2.72 (2.05)	3.59* (1.42)
$\Delta$ Protection of Capital	-2.70* (1.14)	-3.19*** (0.95)	-1.89 (1.44)	-2.52* (1.05)
$\Delta$ Overseas Income	0.57 (0.56)	0.49 (0.45)	0.24 (0.26)	0.22 (0.20)
$\Delta$ % Protestant Cities	-1.15 (1.32)	-1.86 (1.49)	-0.50 (1.31)	-0.76 (0.97)
$\Delta$ % Muslim Cities	1.40* (0.59)	1.62** (0.55)	1.75 (1.10)	2.31*** (0.59)
$\Delta$ Parliament	-1.13 (0.90)	-0.20 (0.87)	0.41 (1.34)	1.58 <sup>+</sup> (0.93)
$\Delta$ # Meetings of Parliament (10s)	-0.44 <sup>+</sup> (0.24)	-0.33 <sup>+</sup> (0.18)	-0.09 (0.22)	-0.13 (0.13)
$\Delta$ Population in Cities (millions)	-0.84* (0.34)	-0.66** (0.26)	-0.20 (0.29)	-0.26 (0.18)
year=1400	0.11 (0.12)	0.04 (0.10)	-0.13 (0.24)	-0.22 (0.21)
year=1500	0.00 (0.15)	0.04 (0.13)	-0.01 (0.18)	-0.10 (0.14)
year=1600	0.16 (0.17)	0.02 (0.15)	0.18 (0.15)	-0.05 (0.11)
year=1700	0.14 (0.23)	0.11 (0.19)	0.05 (0.29)	-0.13 (0.23)
Constant	-0.24 (0.16)	-0.08 (0.14)	-0.23 (0.16)	-0.02 (0.11)
Observations	100	100	135	135
R <sup>2</sup>	0.71	0.69	0.36	0.40

Notes: DV takes value 0 if no serfdom law is in effect and 1 if any serfdom law is in effect. See text for description of variables. Clustered standard errors by polity in parentheses. <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A9: Explanations for *Change* in Serfdom

	NAs Dropped		NAs=0	
	(1) Small States=3	(2) Small States=0	(3) Small States=3	(4) Small States=0
$\Delta$ Executive Constraints	5.40** (2.01)	5.68*** (1.55)	2.72 (2.05)	3.59* (1.42)
$\Delta$ Protection of Capital	-2.70* (1.14)	-3.19*** (0.95)	-1.89 (1.44)	-2.52* (1.05)
$\Delta$ Overseas Income	0.57 (0.56)	0.49 (0.45)	0.24 (0.26)	0.22 (0.20)
$\Delta$ % Protestant Cities	-1.15 (1.32)	-1.86 (1.49)	-0.50 (1.31)	-0.76 (0.97)
$\Delta$ % Muslim Cities	1.40* (0.59)	1.62** (0.55)	1.75 (1.10)	2.31*** (0.59)
$\Delta$ Parliament	-1.13 (0.90)	-0.20 (0.87)	0.41 (1.34)	1.58+ (0.93)
$\Delta$ # Meetings of Parliament (10s)	-0.44+ (0.24)	-0.33+ (0.18)	-0.09 (0.22)	-0.13 (0.13)
$\Delta$ Population in Cities (millions)	-0.84* (0.34)	-0.66** (0.26)	-0.20 (0.29)	-0.26 (0.18)
year=1400	0.11 (0.12)	0.04 (0.10)	-0.13 (0.24)	-0.22 (0.21)
year=1500	0.00 (0.15)	0.04 (0.13)	-0.01 (0.18)	-0.10 (0.14)
year=1600	0.16 (0.17)	0.02 (0.15)	0.18 (0.15)	-0.05 (0.11)
year=1700	0.14 (0.23)	0.11 (0.19)	0.05 (0.29)	-0.13 (0.23)
Constant	-0.24 (0.16)	-0.08 (0.14)	-0.23 (0.16)	-0.02 (0.11)
Observations	100	100	135	135
R <sup>2</sup>	0.71	0.69	0.36	0.40

Notes: See text for description of variables. Clustered standard errors in parentheses. +  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A10: Explanations for *Change* in Serfdom, Robust Standard Errors

	NAs Dropped		NAs=0	
	(1) Small States=3	(2) Small States=0	(3) Small States=3	(4) Small States=0
$\Delta$ Executive Constraints	5.40** (2.01)	5.68*** (1.55)	2.72 (2.05)	3.59* (1.42)
$\Delta$ Protection of Capital	-2.70* (1.14)	-3.19*** (0.95)	-1.89 (1.44)	-2.52* (1.05)
$\Delta$ Overseas Income	0.57 (0.56)	0.49 (0.45)	0.24 (0.26)	0.22 (0.20)
$\Delta$ % Protestant Cities	-1.15 (1.32)	-1.86 (1.49)	-0.50 (1.31)	-0.76 (0.97)
$\Delta$ % Muslim Cities	1.40* (0.59)	1.62** (0.55)	1.75 (1.10)	2.31*** (0.59)
$\Delta$ Parliament	-1.13 (0.90)	-0.20 (0.87)	0.41 (1.34)	1.58+ (0.93)
$\Delta$ # Meetings of Parliament (10s)	-0.44+ (0.24)	-0.33+ (0.18)	-0.09 (0.22)	-0.13 (0.13)
$\Delta$ Population in Cities (millions)	-0.84* (0.34)	-0.66** (0.26)	-0.20 (0.29)	-0.26 (0.18)
year=1400	0.11 (0.12)	0.04 (0.10)	-0.13 (0.24)	-0.22 (0.21)
year=1500	0.00 (0.15)	0.04 (0.13)	-0.01 (0.18)	-0.10 (0.14)
year=1600	0.16 (0.17)	0.02 (0.15)	0.18 (0.15)	-0.05 (0.11)
year=1700	0.14 (0.23)	0.11 (0.19)	0.05 (0.29)	-0.13 (0.23)
Constant	-0.24 (0.16)	-0.08 (0.14)	-0.23 (0.16)	-0.02 (0.11)
Observations	100	100	135	135
R <sup>2</sup>	0.71	0.69	0.36	0.40

Notes: See text for description of variables. Robust standard errors in parentheses. +  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A11: Explanations for *Change* in Serfdom, Number of Cities instead of City Population

	NAs Dropped		NAs=0	
	(1) Small States=3	(2) Small States=0	(3) Small States=3	(4) Small States=0
$\Delta$ Executive Constraints	5.11* (2.18)	5.52*** (1.65)	2.60 (2.03)	3.50* (1.42)
$\Delta$ Protection of Capital	-2.60* (1.25)	-3.15** (1.03)	-1.87 (1.46)	-2.50* (1.07)
$\Delta$ Overseas Income	0.50 (0.55)	0.45 (0.45)	0.25 (0.23)	0.22 (0.17)
$\Delta$ % Protestant Cities	-1.36 (1.41)	-2.03 (1.58)	-0.69 (1.37)	-0.88 (1.03)
$\Delta$ % Muslim Cities	2.12*** (0.52)	2.21*** (0.53)	1.93 (1.19)	2.50*** (0.63)
$\Delta$ Parliament	-1.07 (0.96)	-0.13 (0.89)	0.39 (1.36)	1.58+ (0.95)
$\Delta$ # Meetings of Parliament (10s)	-0.39 (0.26)	-0.31 (0.19)	-0.05 (0.23)	-0.10 (0.14)
$\Delta$ # Cities (100s)	-0.89* (0.41)	-0.70* (0.30)	-0.08 (0.34)	-0.19 (0.20)
year=1400	0.10 (0.12)	0.04 (0.11)	-0.13 (0.24)	-0.21 (0.21)
year=1500	-0.01 (0.15)	0.04 (0.13)	-0.00 (0.18)	-0.10 (0.14)
year=1600	0.17 (0.18)	0.03 (0.14)	0.17 (0.15)	-0.06 (0.11)
year=1700	0.20 (0.28)	0.16 (0.23)	0.08 (0.29)	-0.10 (0.23)
Constant	-0.24 (0.17)	-0.09 (0.14)	-0.24 (0.16)	-0.02 (0.11)
Observations	100	100	135	135
R <sup>2</sup>	0.66	0.66	0.35	0.39

Notes: See text for description of variables. Clustered standard errors in parentheses. +  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A12: Explanations for *Change* in Serfdom, Interaction with Credit Crunches

	NAs Dropped		NAs=0	
	(1) Small States=3	(2) Small States=0	(3) Small States=3	(4) Small States=0
$\Delta$ Executive Constraints	1.51* (0.73)	4.88** (1.56)	-0.38 (0.63)	2.26+ (1.26)
$\Delta$ Protection of Capital	-0.15 (0.29)	-2.31** (0.81)	0.32 (0.41)	-1.59+ (0.89)
$\Delta$ Overseas Income	0.25 (0.33)	0.01 (0.25)	0.25 (0.16)	0.21 (0.14)
$\Delta$ % Protestant Cities	-0.96 (1.81)	-1.60 (2.15)	1.76 (2.47)	-0.16 (2.02)
$\Delta$ % Muslim Cities	-6.34*** (1.37)	-3.96* (1.66)	-2.24 (1.46)	-0.63 (1.46)
$\Delta$ Parliament	-2.82** (1.04)	-1.90+ (1.04)	-1.01 (1.25)	0.96 (1.06)
$\Delta$ # Meetings of Parliament (10s)	-0.05 (0.19)	0.10 (0.19)	0.15 (0.29)	-0.05 (0.18)
$\Delta$ Population in Cities (millions)	-0.14 (0.56)	0.33 (0.61)	0.74 (0.85)	0.07 (0.46)
year=1300	0.00 (.)	0.00 (.)	0.00 (.)	0.00 (.)
year=1400	0.12 (0.09)	0.08 (0.09)	-0.16 (0.26)	-0.23 (0.22)
year=1500	0.05 (0.12)	0.16 (0.12)	0.10 (0.19)	-0.03 (0.13)
year=1600	0.01 (0.12)	0.03 (0.13)	0.14 (0.16)	-0.03 (0.11)
year=1700	-0.10 (0.13)	0.03 (0.15)	-0.05 (0.26)	-0.17 (0.21)
year=1400 $\times$ $\Delta$ Executive Constraints	3.75 (5.64)	-8.53+ (4.50)	-7.17 (7.18)	-5.40 (5.85)
year=1500 $\times$ $\Delta$ Executive Constraints	3.38*** (0.96)	0.46 (1.93)	4.63** (1.71)	2.47 (2.01)
year=1600 $\times$ $\Delta$ Executive Constraints	2.05 (1.33)	-2.51 (1.87)	2.10 (1.47)	-1.23 (1.62)
year=1700 $\times$ $\Delta$ Executive Constraints	143.54*** (24.75)	110.62*** (21.95)	118.56*** (32.42)	64.91** (22.29)
year=1400 $\times$ $\Delta$ Protection of Capital	-2.19 (2.90)	4.49+ (2.31)	1.95 (3.39)	2.90 (2.81)
year=1500 $\times$ $\Delta$ Protection of Capital	-3.67*** (0.97)	-2.38 (1.49)	-4.67** (1.74)	-2.39 (2.04)
year=1600 $\times$ $\Delta$ Protection of Capital	-3.27 (3.62)	-2.60 (4.38)	-6.00 (4.68)	-0.02 (3.20)
year=1700 $\times$ $\Delta$ Protection of Capital	-144.30*** (26.46)	-113.27*** (23.16)	-120.49*** (34.19)	-65.32** (22.97)
Constant	-0.16 (0.14)	-0.06 (0.14)	-0.20 (0.15)	-0.01 (0.11)
Observations	100	100	135	135
R <sup>2</sup>	0.86	0.82	0.39	0.46

Notes: See text for description of variables. Clustered standard errors in parentheses. +  $p < 0.10$ , \*  $p < 0.05$ ,

\*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Table A13: Explanations for *Change* in Serfdom, Dropping Hungary and Habsburg

	NAs Dropped		NAs=0	
	(1)	(2)	(3)	(4)
	Small States=3	Small States=0	Small States=3	Small States=0
$\Delta$ Executive Constraints	1.53** (0.59)	2.12 <sup>+</sup> (1.21)	-0.13 (0.37)	1.68 <sup>+</sup> (0.99)
$\Delta$ Protection of Capital	-0.53 (0.47)	-1.10 <sup>+</sup> (0.66)	0.09 (0.29)	-1.14 <sup>+</sup> (0.67)
$\Delta$ Overseas Income	0.13 (0.20)	0.10 (0.22)	0.02 (0.16)	0.10 (0.18)
$\Delta$ % Protestant Cities	-1.20 (0.96)	-1.79 (1.13)	-0.53 (1.16)	-0.78 (0.84)
$\Delta$ % Muslim Cities	-3.31 (3.35)	0.88 (3.50)	-1.37 (1.85)	1.44 (1.24)
$\Delta$ Parliament	-2.22** (0.79)	-1.14 (0.99)	-0.56 (1.22)	1.02 (1.02)
$\Delta$ # Meetings of Parliament (10s)	-0.05 (0.06)	-0.01 (0.13)	0.11 (0.15)	-0.01 (0.13)
$\Delta$ Population in Cities (millions)	-0.32* (0.13)	-0.24 (0.19)	0.09 (0.17)	-0.08 (0.12)
Observations	94	94	129	129
R <sup>2</sup>	0.55	0.34	0.09	0.10

Notes: See text for description of variables. Clustered standard errors in parentheses. <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

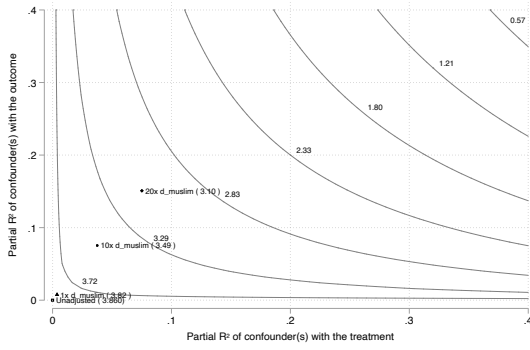


Table A14: Explanations for *Change* in Serfdom, Including the Change in Proportion of Communes

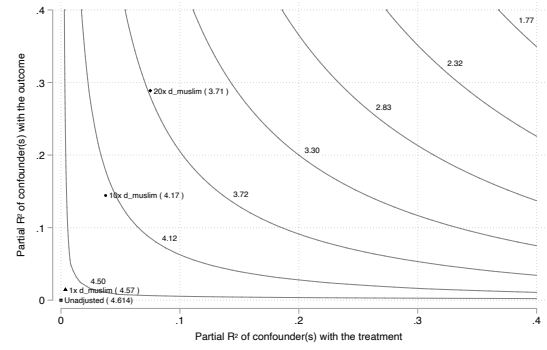
	NAs Dropped		NAs=0	
	(1)	(2)	(3)	(4)
	Small States=3	Small States=0	Small States=3	Small States=0
$\Delta$ Executive Constraints	3.83 <sup>+</sup> (2.03)	4.54*** (1.38)	3.26 (2.12)	4.35** (1.42)
$\Delta$ Protection of Capital	-1.74 (1.17)	-2.51** (0.81)	-1.76 (1.24)	-2.60** (0.86)
$\Delta$ Overseas Income	0.35 (0.38)	0.34 (0.32)	0.33 (0.28)	0.34 (0.27)
$\Delta$ % Protestant Cities	-2.28 (3.39)	-3.72 (3.06)	-2.06 (3.79)	-3.38 (3.20)
$\Delta$ % Muslim Cities	1.25* (0.62)	1.37* (0.57)	0.85 (1.29)	1.26 <sup>+</sup> (0.68)
$\Delta$ Parliament	-1.25 <sup>+</sup> (0.76)	0.29 (0.66)	-0.10 (1.14)	0.88 (0.78)
$\Delta$ # Meetings of Parliament (10s)	-0.31 (0.22)	-0.28 <sup>+</sup> (0.16)	-0.18 (0.23)	-0.22 (0.15)
$\Delta$ Population in Cities (millions)	-0.65 <sup>+</sup> (0.34)	-0.53* (0.23)	-0.35 (0.35)	-0.42 <sup>+</sup> (0.21)
$\Delta$ Prop. Communes (per 100 cities)	0.41 (0.56)	0.25 (0.41)	0.18 (0.99)	-0.27 (0.46)
year=1400	0.09 (0.18)	0.01 (0.07)	0.02 (0.19)	-0.07 (0.09)
year=1500	-0.00 (0.17)	-0.09 (0.13)	0.04 (0.22)	-0.14 (0.11)
year=1600	0.13 (0.19)	-0.07 (0.13)	0.13 (0.17)	-0.10 (0.10)
year=1700	0.07 (0.30)	-0.08 (0.23)	0.09 (0.28)	-0.11 (0.19)
Constant	-0.19 (0.14)	-0.02 (0.06)	-0.24 (0.16)	-0.01 (0.05)
Observations	77	77	104	104
R <sup>2</sup>	0.70	0.68	0.55	0.61

Notes: See text for description of variables. Clustered standard errors in parentheses. <sup>+</sup>  $p < 0.10$ , \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

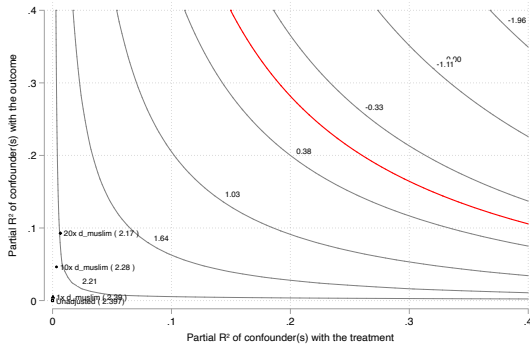
Figure A1: Sensitivity Analysis: Effect of a confounder X times the *change* in % MUSLIM on point estimate of *change* in EXECUTIVE CONSTRAINTS



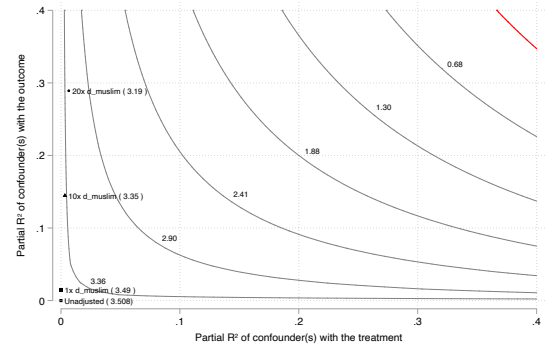
(a) Specification 1



(b) Specification 2



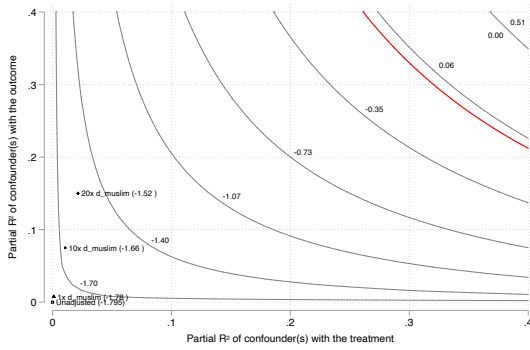
(c) Specification 3



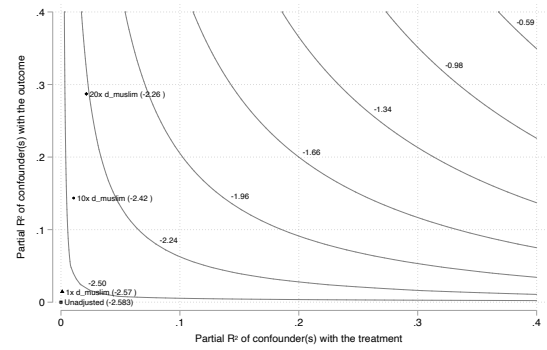
(d) Specification 4

*Note:* This figure displays the partial  $R^2$  of the treatment (EXECUTIVE CONSTRAINTS) and the outcome (SERFDOM) explained by a confounder x times the size of the effect of % MUSLIM . The red line is the point at which the coefficient on the treatment equals zero. Specification 1 codes serfdom in all “Small states” of the Holy Roman Empire as 3 and drops NA; Specification 2 codes serfdom in all “Small states” of the Holy Roman Empire as 0 and drops NA; Specifications 3 and 4 replicate Specifications 1 and 2 but code all NAs as zero.

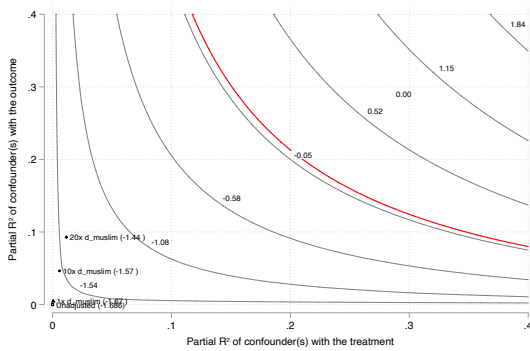
Figure A2: Sensitivity Analysis: Effect of a confounder X times the *change* in % MUSLIM on point estimate of *change* in PROTECTION OF CAPITAL



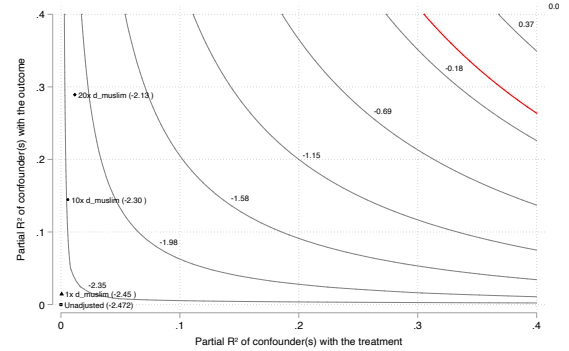
(a) Specification 1



(b) Specification 2



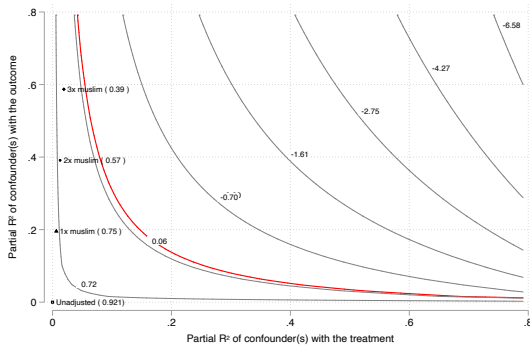
(c) Specification 3



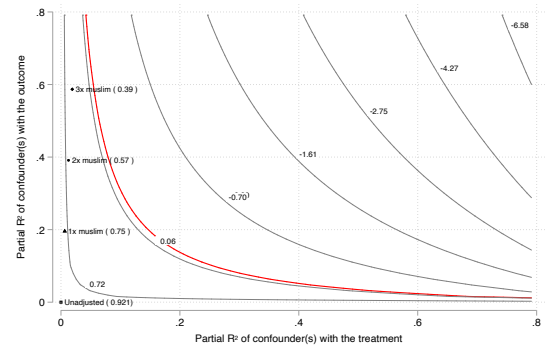
(d) Specification 4

*Note:* This figure displays the partial  $R^2$  of the treatment (PROTECTION OF CAPITAL) and the outcome (SERFDOM) explained by a confounder x times the size of the effect of % MUSLIM . The red line is the point at which the coefficient on the treatment equals zero. Specification 1 codes serfdom in all “Small states” of the Holy Roman Empire as 3 and drops NA; Specification 2 codes serfdom in all “Small states” of the Holy Roman Empire as 0 and drops NA; Specifications 3 and 4 replicate Specifications 1 and 2 but code all NAs as zero.

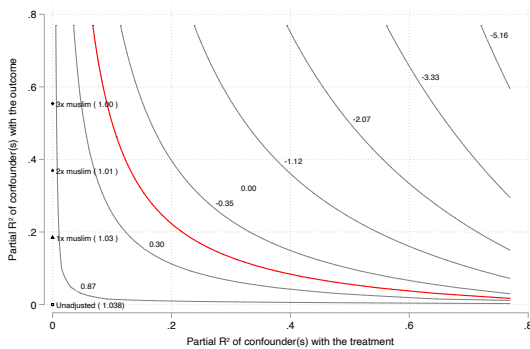
Figure A3: Sensitivity Analysis: Effect of a confounder X times the *level* of % MUSLIM on point estimate of *level* of EXECUTIVE CONSTRAINTS



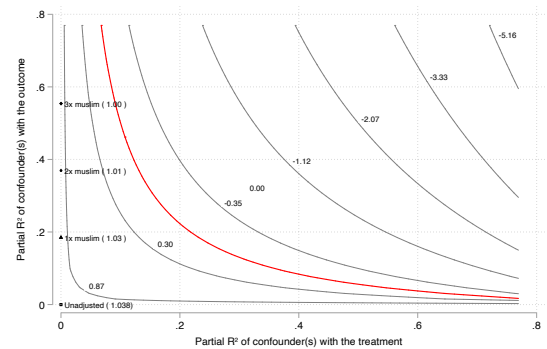
(a) Specification 1



(b) Specification 2



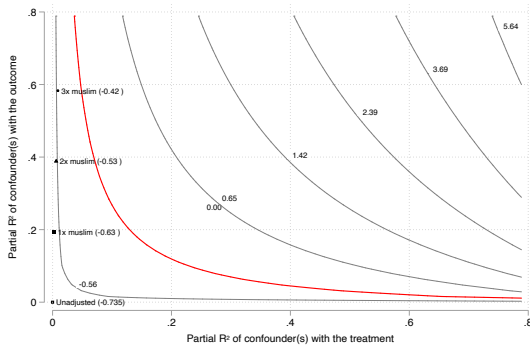
(c) Specification 3



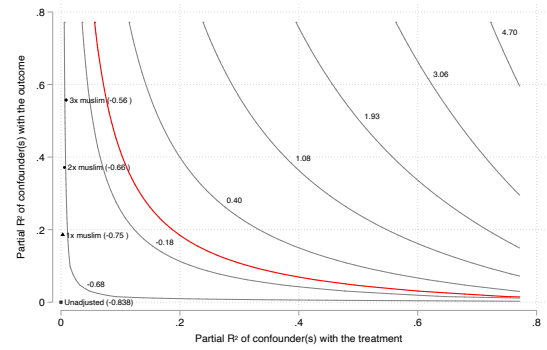
(d) Specification 4

*Note:* This figure displays the partial  $R^2$  of the treatment (EXECUTIVE CONSTRAINTS) and the outcome (SERFDOM) explained by a confounder x times the size of the effect of % MUSLIM . The red line is the point at which the coefficient on the treatment equals zero. Specification 1 codes serfdom in all “Small states” of the Holy Roman Empire as 3 and drops NA; Specification 2 codes serfdom in all “Small states” of the Holy Roman Empire as 0 and drops NA; Specifications 3 and 4 replicate Specifications 1 and 2 but code all NAs as zero.

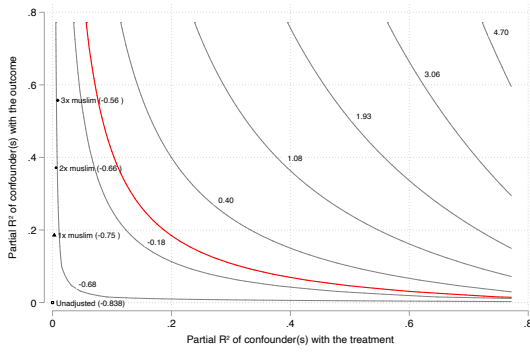
Figure A4: Sensitivity Analysis: Effect of a confounder X times the *level* of % MUSLIM on point estimate of *level* of PROTECTION OF CAPITAL



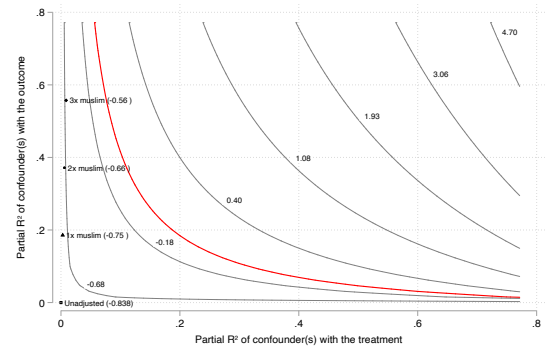
(a) Specification 1



(b) Specification 2



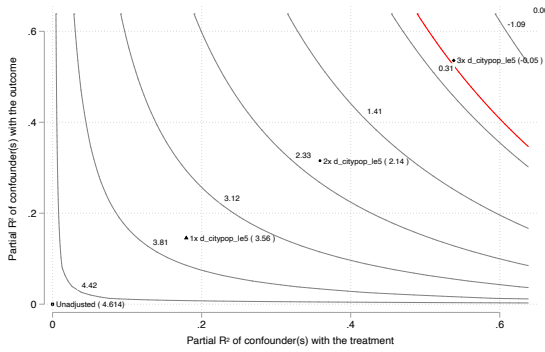
(c) Specification 3



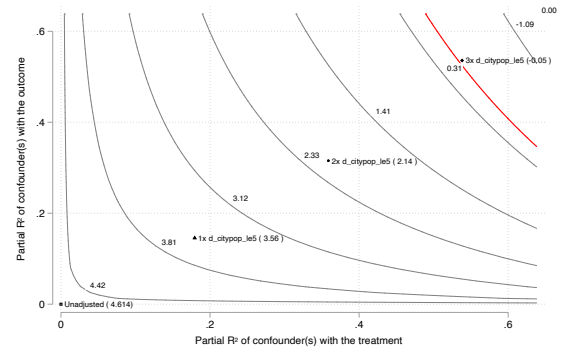
(d) Specification 4

*Note:* This figure displays the partial  $R^2$  of the treatment (PROTECTION OF CAPITAL) and the outcome (SERFDOM) explained by a confounder x times the size of the effect of % MUSLIM . The red line is the point at which the coefficient on the treatment equals zero. Specification 1 codes serfdom in all “Small states” of the Holy Roman Empire as 3 and drops NA; Specification 2 codes serfdom in all “Small states” of the Holy Roman Empire as 0 and drops NA; Specifications 3 and 4 replicate Specifications 1 and 2 but code all NAs as zero.

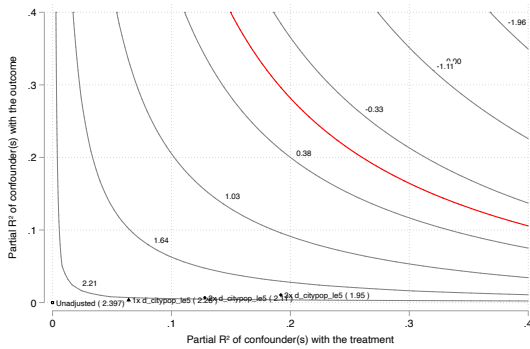
Figure A5: Sensitivity Analysis: Effect of a confounder X times the *change* in CITY POPULATION on point estimate of *change* in EXECUTIVE CONSTRAINTS



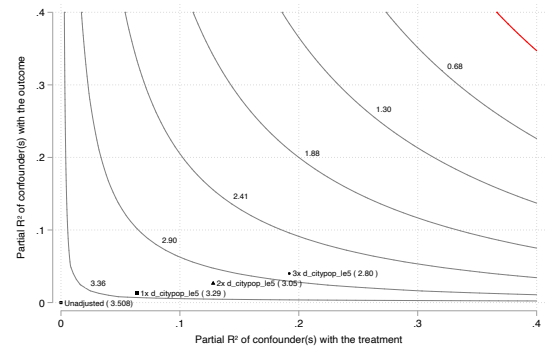
(a) Specification 1



(b) Specification 2



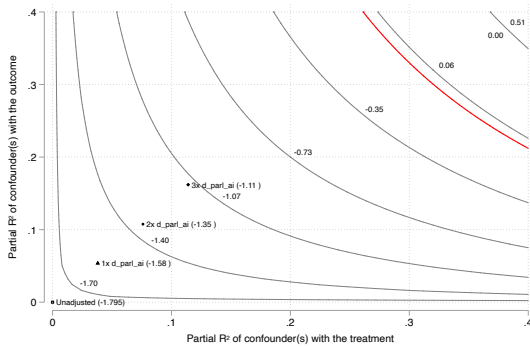
(c) Specification 3



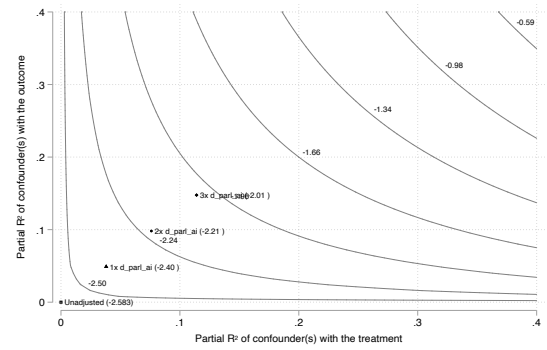
(d) Specification 4

*Note:* This figure displays the partial  $R^2$  of the treatment (EXECUTIVE CONSTRAINTS) and the outcome (SERFDOM) explained by a confounder  $x$  times the size of the effect of CITY POPULATION. The red line is the point at which the coefficient on the treatment equals zero. Specification 1 codes serfdom in all “Small states” of the Holy Roman Empire as 3 and drops NA; Specification 2 codes serfdom in all “Small states” of the Holy Roman Empire as 0 and drops NA; Specifications 3 and 4 replicate Specifications 1 and 2 but code all NAs as zero.

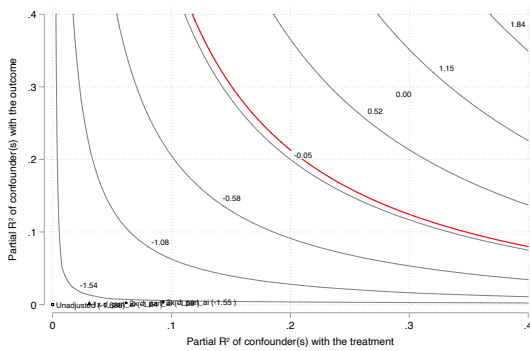
Figure A6: Sensitivity Analysis: Effect of a confounder X times the *change* in NUMBER OF PARLIAMENT MEETINGS on point estimate of *change* in PROTECTION OF CAPITAL



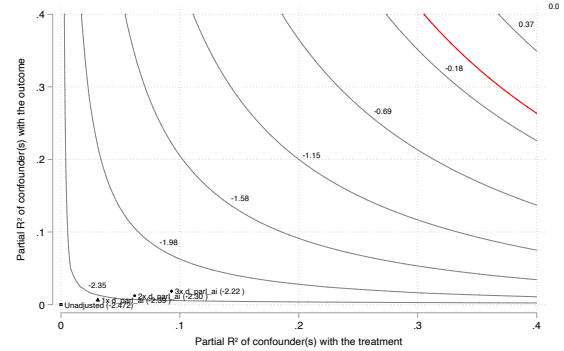
(a) Specification 1



(b) Specification 2



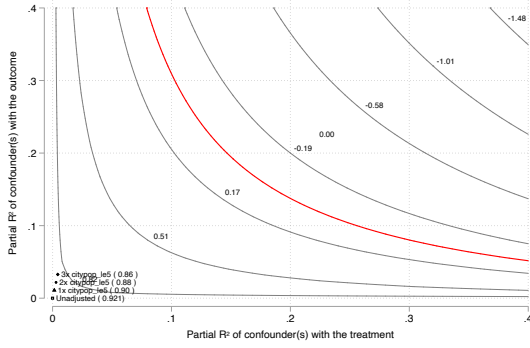
(c) Specification 3



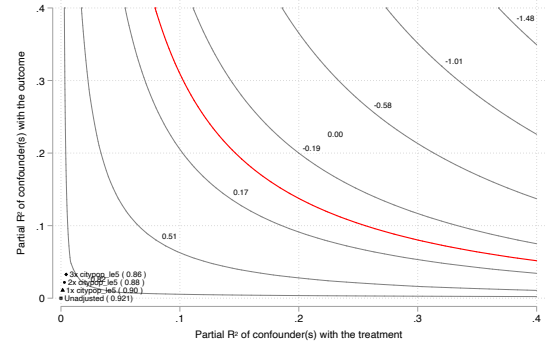
(d) Specification 4

*Note:* This figure displays the partial  $R^2$  of the treatment (PROTECTION OF CAPITAL) and the outcome (SERFDOM) explained by a confounder  $x$  times the size of the effect of NUMBER OF PARLIAMENT MEETINGS. The red line is the point at which the coefficient on the treatment equals zero. Specification 1 codes serfdom in all “Small states” of the Holy Roman Empire as 3 and drops NA; Specification 2 codes serfdom in all “Small states” of the Holy Roman Empire as 0 and drops NA; Specifications 3 and 4 replicate Specifications 1 and 2 but code all NAs as zero.

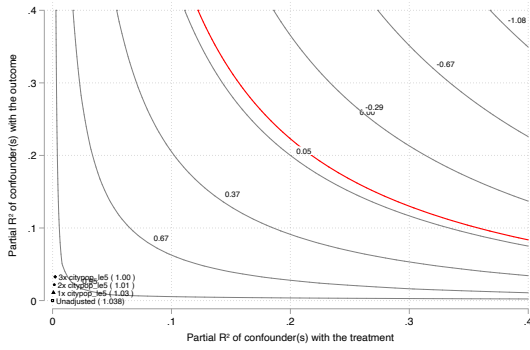
Figure A7: Sensitivity Analysis: Effect of a confounder X times the *level* of CITY POPULATION on point estimate of *level* of EXECUTIVE CONSTRAINTS



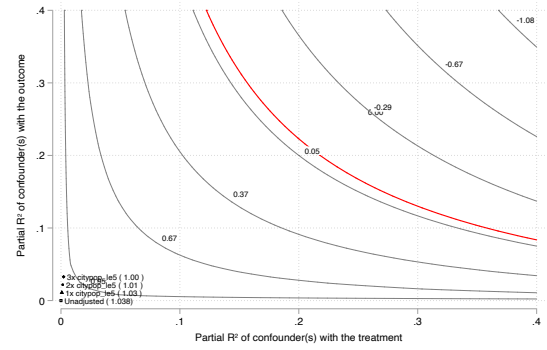
(a) Specification 1



(b) Specification 2



(c) Specification 3

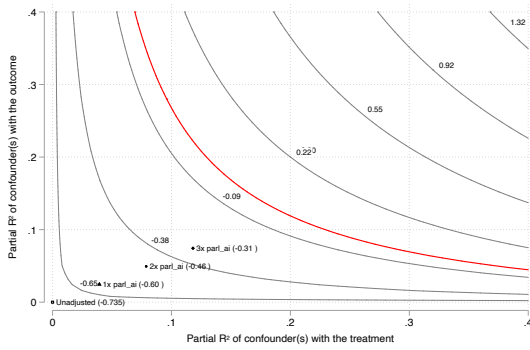


(d) Specification 4

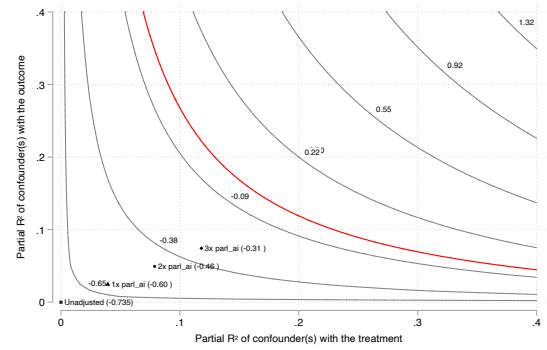
*Note:* This figure displays the partial  $R^2$  of the treatment (EXECUTIVE CONSTRAINTS) and the outcome (SERFDOM) explained by a confounder x times the size of the effect of CITY POPULATION . The red line is the point at which the coefficient on the treatment equals zero. Specification 1 codes serfdom in all “Small states” of the Holy Roman Empire as 3 and drops NA; Specification 2 codes serfdom in all “Small states” of the Holy Roman Empire as 0 and drops NA; Specifications 3 and 4 replicate Specifications 1 and 2 but code all NAs as zero.



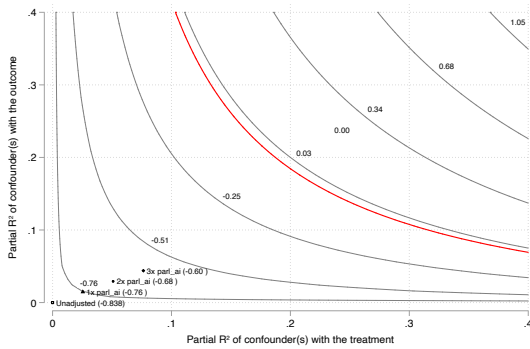
Figure A8: Sensitivity Analysis: Effect of a confounder X times the *level* of NUMBER OF PARLIAMENT MEETINGS on point estimate of *level* of PROTECTION OF CAPITAL



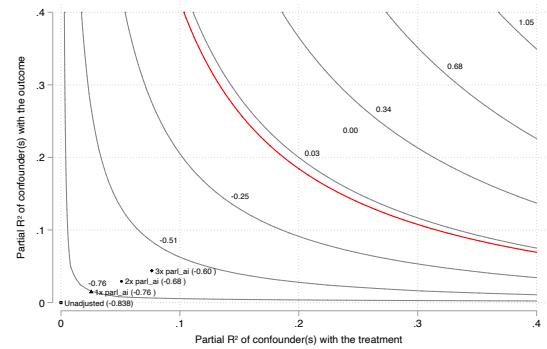
(a) Specification 1



(b) Specification 2



(c) Specification 3



(d) Specification 4

*Note:* This figure displays the partial  $R^2$  of the treatment (PROTECTION OF CAPITAL) and the outcome (SERFDOM) explained by a confounder x times the size of the effect of NUMBER OF PARLIAMENT MEETINGS. The red line is the point at which the coefficient on the treatment equals zero. Specification 1 codes serfdom in all “Small states” of the Holy Roman Empire as 3 and drops NA; Specification 2 codes serfdom in all “Small states” of the Holy Roman Empire as 0 and drops NA; Specifications 3 and 4 replicate Specifications 1 and 2 but code all NAs as zero.

# **Additional Information on Serfdom and the Black Death**

## **History of serfdom**

“Proto”-serfdom developed in the Roman lands in the late empire period. As state control of territory broke down, soldiers increasingly became landlords, and landlords increasingly became warlords (Wittaker 1993, 281). With concomitant lack of security, peasants lost their rights and bound themselves to their landlord in a relationship much like serfdom (Wittaker 1993, 283, 292). While the state tried to prevent the binding of peasants to their landlord with legislation in the fourth century AD, to prevent landlords from becoming too powerful, “proto”-serfdom increased (Wittaker 1993, 287).

Serfdom then spread in the Early Middle Ages (ninth through the eleventh centuries) in the Carolingian Empire and then to much of Western Europe. Along the lines of this paper, feudalism at that time was a way to pay troops when there was little cash; it gave the nobility a source of income (as well as a potential base of support for challenging the sovereign); and the peasants gained some physical and economic security (Ferejohn and Rosenbluth 2010, 3-4, Gregg 1976, 44–45). There were few markets and little cash: lords could have offered free laborers cash for their services, but they would have trouble spending it; they could offer a consumption bundle instead of cash, but there was often no higher authority to enforce the contract (North and Thomas 1973, 39). Further, borders were unstable, and there was little central authority in most places to provide protection (Ferejohn and Rosenbluth 2010, 3-4). Peasants, then, turned to the lord for protection. Finally, there were few ways to insurance against a poor harvest; the serfdom relationship, however, often provided at least some measure of insurance against a poor harvest, as serfs were often granted part of the harvest from the communal or lord’s fields (Gregg 1976, 44–45).

In the Late Middle Ages and Early Modern Period, the logic for this relationship began to break down. First, markets expanded, making cash transactions easier, allowing landlords to pay free laborers rather than use serfs and pay soldiers in cash rather than in land. Second, borders

became more stable, and property rights became slightly more secure. Peasants, thus, had less incentive to tie themselves to the lord for protection.

After the Black Death, serfdom was imposed in Eastern Europe by government decree (Bush 1996). There were two types of serfdom: serfs bound to their lord or bound to the land (Bush 1996, 200). If the serf was tied to the land, any free peasant who took over the holding would now be considered a serf and lose his freedom. If the serf then sold the parcel to another, he would regain his freedom. Serfs who were tied to the lord had no such rights; instead, their unfree condition was usually hereditary (Bush 1996, 200). In practice, these differences were minimal (Bush 1996, 206). For example, a peasant in Bohemia, where serfdom was based on ties to the land, could only leave their lord's estate if they purchased their freedom or if they found someone else to take over their plot (Bush 1996, 205). Given that almost all peasants were under the prohibition against moving, it was almost impossible to find someone else to take over the plot or earn enough for emancipation. In contrast, in Poland, serfs were bound to the lord and had little recourse to buy their freedom (Bush 1996, 205).

## **The Black Death**

The outbreak of the plague known as the Black Death likely had its origins in Central Asia sometime in the late 1330s or early 1340s (Benedictow 2004, Aberth 2005). From Central Asia, it was brought by the Mongols during their siege to Caffa (or Kaffa, now Feodosiya in southern Russia), a trading post of Genoese and Venetian merchants (Benedictow 2004, 50-51). Contemporary accounts of the siege argue that as the Mongol army was beginning to disintegrate due to the plague, it threw dead bodies over the city walls, spreading the plague to the Italians (Benedictow 2004, Aberth 2005). While corpses are not contagious (Benedictow 2004, 53) and it is unclear if rat fleas could survive being catapulted over city wall (Aberth 2005, 13), it is clear that the Italian merchants contracted the plague in Caffa (Benedictow 2004, 53). Once the Mongol army had disintegrated, Genoese merchants fled the city and headed for Constantinople, promptly infecting that city (Benedictow 2004). From Constantinople, the plague was spread along the customary trade

routes throughout Europe and the Middle East, Greece, the Balkans, and Italy by the end of 1348 (Benedictow 2004). By 1349, the plague had moved into modern-day Spain, France, England, Ireland, Wales, and Norway (Benedictow 2004). By 1352 or 1353, the Black Death had made its way into northern Russia (Benedictow 2004). Thus, by 1353 the Black Death had hit the vast majority of Europe.

There is some dispute among historians as to whether Poland and Bohemia, two areas in which serfdom was imposed after the Black Death, suffered from the plague (Aberth 2001, 120); it is clear that the plague hit the East and West of Poland and that prices right after the plague followed a similar trajectory as prices in Western Europe with wages rising (Benedictow 2004, 221-222). Similarly, the limited archival evidence from Bohemia shows that the plague had struck in some-time in 1349 or 1350 (Benedictow 2004, 222-223). As the plague struck to the north, south, east, and west of these areas, it is hard to believe that these two areas were isolated enough to miss the plague. It does appear that the plague skipped Iceland, much of Finland (Benedictow 2004, 216, 217). Figure A9 shows the areas of Europe where the Black Death struck.

Later outbreaks of the plague were often spread by war, especially to previously isolated communities (Holborn 1959, Voigtländer and Voth 2013). For example, in Figure A10 plague outbreaks track the increase in conflicts in the late 1400s through the 1500s, and we can easily spot the Thirty Years War, which led to the highest decade total of recorded outbreaks. French troops, for example, caused an outbreak of the plague in the 1620s that caused the death of over one million people in northern Italy (Landers 2003, 348).

## **Mortality Rates in the Black Death and Later Outbreaks of the Plague**

One issue with determining mortality rates of the Black Death is that the archival record mainly records the wealthy; much of the data comes from tax rolls, censuses, and other official claims that dealt with wealth. Many tax rolls did not capture those who were too poor to pay any tax, and also, many people evaded the tax collector (Benedictow 2004, 261). Thus, many archival sources underestimate the number of poor before the plague. However, the poor, due to poor nutrition and

Figure A9: Areas of the Black Death in Europe

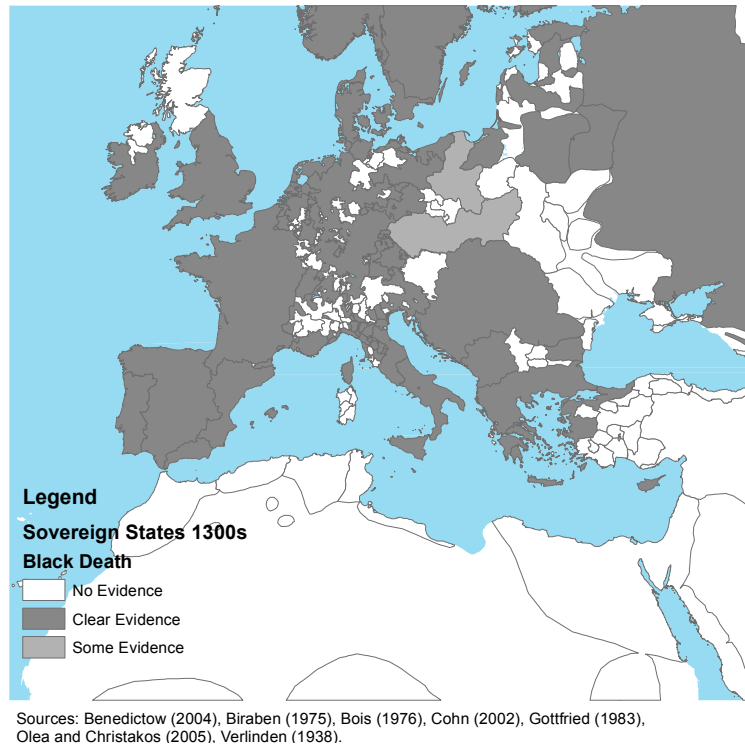
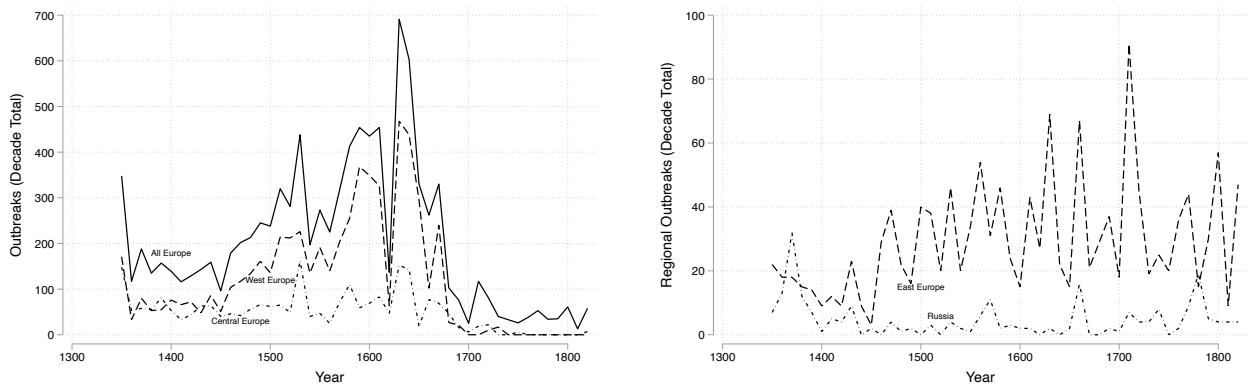


Figure A10: Recorded Outbreaks of the Plague per Decade



*Note:* Graphs report totals for each decade. West Europe includes Spain, Portugal, the UK, France, and the Low Countries. Central Europe includes Italy, Malta, Germany, Austria, Switzerland, Bohemia, and the Nordic Countries. East Europe includes Poland, the Baltics, Hungary, and the Balkans. Russia includes both Northwest and Southern Russia, Ukraine, and the Caucasus. Data originally from Biraben (1975) and was compiled by Voigtländer and Voth (2013).

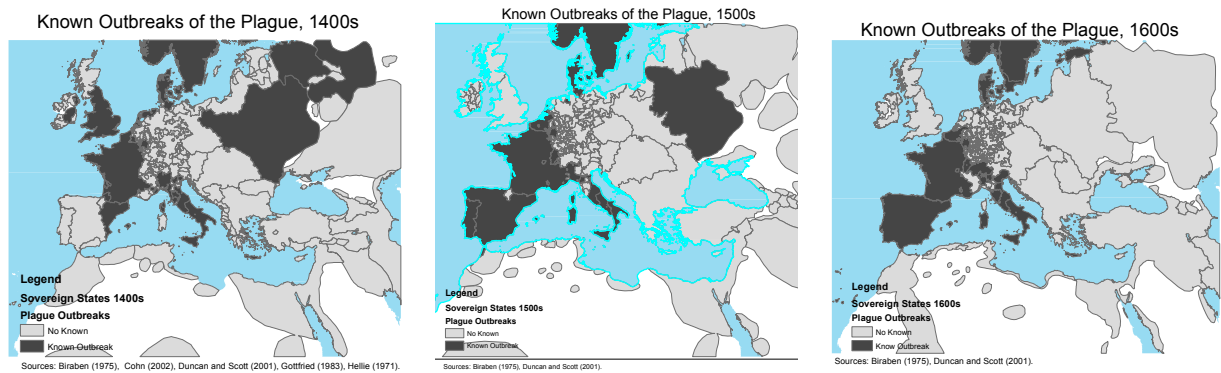
generally worse health, were more likely to be killed in the epidemic (Benedictow 2004, 261).

This undercount of mortality has been borne out by more recent literature on English mortality. Due to the problems counting the poor, Aberth argues that the usual English mortality rate of 27%, pulled from inheritance records, is biased downward (2001, 124). He found that clerical mortality was almost 50% in some places reaching above 70% (Aberth 2001, 125). Although clerics tended to be better fed and had better overall health, they were also more exposed to the disease due to their clerical duties (Aberth 2001, 126). Thus, Aberth believes that clerical data probably reflects better the actual level of mortality in England (2001, 126);. However, it is hard to know if these two factors, better health but more exposure, would add up to similar mortality rates as that of the poor who likely were in worse health, to begin with, but were less exposed.

As far as the archival record allows us to know, the mortality rate for the rest of Europe shows much variation in mortality. Table A15 shows different estimates from Abel (1966), Benedictow (2004), and Christakos et al. (2005), who create estimates from several different sources. Using archival records from Spain, Italy, France, Norway, and England, Benedictow estimated the general mortality rates for most of Europe at about 60% (2004, 383). Aberth confirms that the Continental European mortality was similar to the English mortality rate (2001, 128). Christakos et al. (2005), on the other hand, finds much greater variation in rates, but the data show a rough average of around 33%.

Unfortunately, there is little data on the mortality rates in Eastern Europe. Nonetheless, we can make inferences given the biology of the spread of the plague. Looking at desertion rates, Abel (1966, 520) finds medium levels of desertion in East Prussia (now Kaliningrad Oblast, Russia) and high levels of desertion in Silesia (now part of Poland) near the Czech border. The desertion rates suggest an increased number of deaths in the area and/or a high number of fatalities in a nearby area that created a pull for peasants to migrate. Similarly, data on reforestation from Kaplan, Krumhardt and Zimmermann (2009) show that regions in Central and Eastern Europe had lower rates of reforestation after the Black Death than areas in Western Europe, suggesting lower mortality. Yet, their data also show much greater rates of forest cover in Eastern Europe before the Black Death,

Figure A11: Later Outbreaks of the Plague



suggesting a much lower population density to begin with.

In addition to causing high mortality rates during the Black Death, the plague also circulated throughout Europe over the next 300 years (Figure A11). For example, the plague hit Luxembourg thirteen times between 1360 and 1632 (Biraben 1975, 415-420); Lithuania thirteen times between 1369 and 1555 (Biraben 1975, 421-426); the Netherlands fifteen times between 1360 and 1494 (Gottfried 1983, 133); and Barcelona twenty-two times between 1362 and 1652 (Duncan and Scott 2001, 326-327).

## Effects of the Black Death on prices and wages

After the Black Death, agricultural landlords faced two problems: lower agricultural prices due to a small population and higher labor costs due to a smaller workforce. In the immediate aftermath, prices for both commodities—especially food—and labor increased as there was not enough labor to bring in the food supply (Abel 1966, 46). However, the price trend for commodities quickly reversed (Hilton 1985, 132). Table 1 and Figure A12 give some data on prices changes from before and after the Black Death. By the late 1400s, most grains had suffered a price decrease of about 50%.

In contrast, in the absence of feudal controls on the prices of labor, the cost of labor increased compared to the price of grain, and in some cases, it grew in absolute levels as well (see figure

A12). In Spain, for example, the cost of agricultural labor rose dramatically, and many day laborers refused to work unless their demands were satisfied (Haliczer 1981, 15). Rents too dropped (see Table 1), further increasing the strain on landlords. The decrease in profits for the lords also led to rising debt burdens; for example, the Knight Command of Coblenz, a possession of the Teutonic Knights, told the Grand Master in 1441 that “the debts and annuities have grown too great and I cannot find the means with which to pay them” (Abel 1966, 65).



Figure A12: Price and Wage Data after the Black Death (*Source: Abel (1966)*)

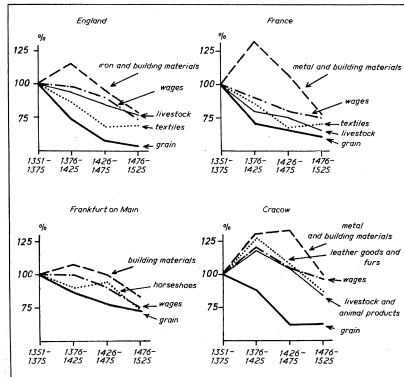


Fig. 10 Price and wage movements in western and central Europe 1351-1525 (50-year averages, silver content of coinage, 1351-75 = 100).

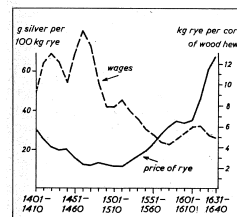


Fig. 11 Wages and price of rye in Göttingen 1401-1640 (trinomial 10-year moving averages).

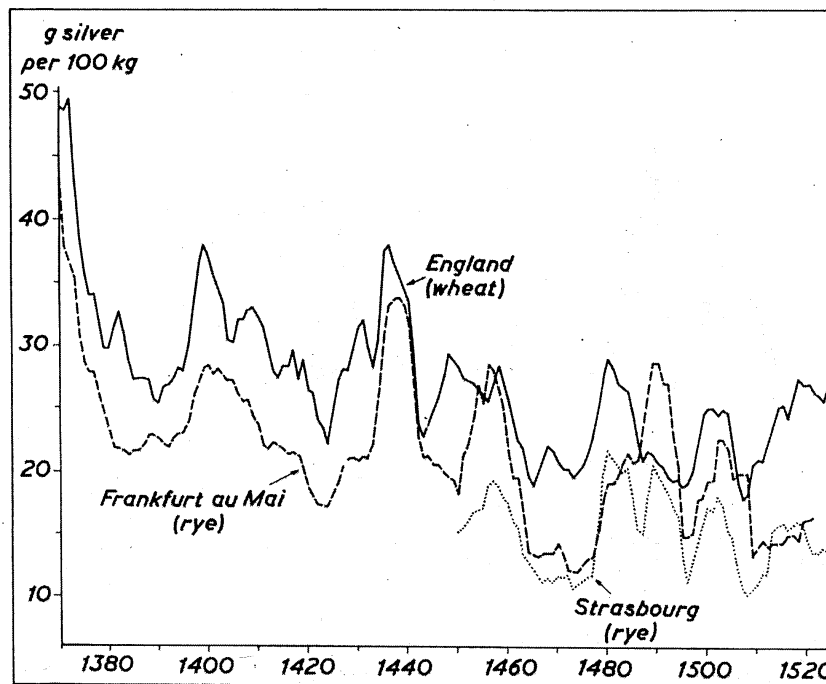


Fig. 14 Grain prices in England and Germany 1370-1526 (seven-term annual moving averages).

Table A15: Mortality Rates from the Black Death

Territory	Mortality Rate	Source
Sweden	33%-50%	Abel (1966)
Denmark	33%-50%	Abel (1966)
Hanseatic Towns, Germany	50%	Abel (1966)
Luneburg, Germany	36% of town councilors	Abel (1966)
Wismar, Germany	42% of town councilors	Abel (1966)
Reval, Germany	27% of town councilors	Abel (1966)
England	62.5%	Benedictow (2004)
Modern Day France	60%	Benedictow (2004)
Modern Day Spain	60%-65%	Benedictow (2004)
Florence	60%	Benedictow (2004)
Tuscany	50-60%	Benedictow (2004)
Piedmont	52.5%	Benedictow (2004)
Norway	62.5%-64%	Benedictow (2004)
Vienna, Austria	33%-66%	Christakos et al. (2005)
Belgium (average)	19.5%-23.75%	Christakos et. al (2005)
Bohemia, Czech Republic	10%	Christakos et. al (2005)
Bornholm, Denmark	50%	Christakos et. al (2005)
France (average)	43.95%-47.2%	Christakos et. al (2005)
Germany (average)	31.56%- 33.93%	Christakos et. al (2005)
Ireland (average)	41.67%-48.33%	Christakos et. al (2005)
Italy (average)	49.64%-52.14%	Christakos et. al (2005)
Norway (average)	74.5%	Christakos et. al (2005)
Portugal (average)	33%-50%	Christakos et. al (2005)
Spain (average)	39.78%-45.07%	Christakos et. al (2005)
Switzerland (average)	43.5%-46%	Christakos et. al (2005)
The UK (average)	50.04%-51.56%	Christakos et. al (2005)

*Notes:* This table presents estimates of mortality from several sources. For Christakos et. al (2005), country averages are the average of the mortality rates for the cities and areas listed and not an average over population; qualitative estimates are not included.

## Collection and coding of the serfdom data

I relied on secondary sources to find data on serfdom laws. The use of secondary sources likely introduces bias: it was challenging to find information on some territories that are not as well studied as others. Further, the historians that I rely on may have missed documents or produced biased accounts of the documents they found to bolster their history interpretation. Nonetheless, historians who are subject matter specialists in this period and different countries have much more training in finding and interpreting documents they found in the archives than a non-specialist. Second, to address concerns about bias over a historian's interpretations, I consulted many sources in different historical traditions to minimize the bias.

With the help of graduate research assistants, I used a snowball search approach to find sources on serfdom. I began my search by entering the term "serfdom" into both Google Scholar and WorldCat. I prioritized the search using the relevant data given by Google and WorldCat, that is, I examined the first entries first. Once a source was found, it was read by my research assistants or me, and the relevant data were entered into the database (details follow). After examining each source, we then examined the sources that it listed.

We found that this search procedure quickly provided data on countries that are often studied in this context, such as Russia, Poland, and Prussia, but it did not turn up as much data on countries that there is less scholarship on this topic, such as Hungary, the Italian states, and some smaller states in the Holy Roman Empire. To obtain data on these countries, we used broader search criteria, including the search terms: "serfdom," "Black Death," "Late Medieval Period," and "Early Modern Period" and the country name, searching for all polities in Europe. We examined over 50 secondary sources in English, French, and German (not all contained information included in the dataset). We found 218 references to serfdom laws, with most sources agreeing upon the date of their passage or at least having dates within the same decade or half-century and contents of a serfdom law. Even with this detailed search, we found few citations on serfdom in Italy, the Low Countries, and some of the small states of the Holy Roman Empire.

We collected information on the territory name, the year in which a law was enacted, all the

details from the source about the law enacted and included the source and the page number. From the contents of the laws on serfdom passed, my RAs and I then coded the data using this simple coding scheme:

- 0:** No serfdom. Example: In 1660, the Statute of Tenures eliminates the last vestiges of serfdom in England (North and Thomas 1973, 155).
- 1:** Wage ordinance/ work-days ordinance. Example: In 1406, Teutonic Prussia enacted a wage ordinance limiting the wage of peasants (Abel 1966, 53).
- 2:** Limited mobility. Example: In 1485, peasants in Old Mark (Germany) had to find a successor before they were permitted to leave (Carsten 1958, 110).
- 3:** Limited mobility combined with return laws or jurisdiction over peasants or increased labor requirements. Example: In 1487 in Old Mark, the law declared that the noblemen who owned a village were entitled to demand labor services but that they should not be too heavy (Carsten 1958, 109).
- 4:** Limited mobility combined with return laws and jurisdiction over peasants/ increased labor requirements. Example: In Teutonic Prussia in 1445, an ordinance that nobody was to receive a peasant without a letter from his lord; if anyone did so, he was to hand over the peasant and pay his arrears. But the peasant was still free to leave if he provided a successor approved by his master; if the latter then refused to give him the letter, the peasant could obtain it from the local official of the Order after due investigation. Ordinance prevented towns from receiving peasants and landlords from filling their deserted holdings at each others' cost (Carsten 1958, 105).
- 5:** No or very limited mobility. Example: In Poland in 1496, a government decree defined the inhabitants of private estates as the subjects of the landlord with no right leave and with limited access to public authority (Bush 1996, 205).

- 6:** No or very limited mobility with return laws/ increased labor requirements/ jurisdiction over peasants. Example: In Bohemia in 1680, Feudal Labour Services Decree: serf was obliged to perform labour services on the demesne of his lord for three days a week but more at hay-making and harvest time which could be increased at will. In practice, this sometimes meant six days per week (Klima 1985, 198).
- 7:** No or very limited mobility with return laws and increasing labor required and jurisdiction over peasants. Example: In Pomerania-Stettin in 1616, new regulations for the peasantry were enacted: all peasants, without exception, were declared serfs and their sons were forbidden to leave without a permit and a formal manumission; they were liable to unlimited labor service; their fields and meadows belong to the lord, and they had no hereditary rights; the lord could take away a farm or put the peasant on another farm; if evicted and not given another farm, the peasant could leave and take his stock with him; even the sons of free peasants, village mayors, innkeeper, and millers were liable to serfdom, and no one could accept a serf without a letter from his lord (Carsten 1958, 162-163).
- 8:** No or very limited mobility with increasing return/ labor required/ jurisdiction, etc. Example: The 1649 regulation that enserfed peasants in Russia imposed serfdom on the Black Earth areas, where it had not been imposed before; set no time limit for the return of fugitive peasants; gave the nobility the right to sell their serfs; and gave nobility full legal jurisdiction over peasants (Hellie 1971, 119,137).

## **Coding of serfdom laws by territory**

Below lists each country in alphabetical order for which we found information about serfdom laws. Below each country are the years for which we found information, the serfdom score for the year in brackets, and the source and information quoted in the source.

### **Andalusia**

1300

[0]

Anderson (1974b, 170): “These warrior confraternities now seized vast estates and appropriated seigneurial jurisdictions over them; it was from the military captains of this century that emerged most of the class of grandees which was to dominate Spanish feudalism thereafter.”

### **Anklam (Pomerania)**

1461

[3]

Carsten (1964, 110): “Peace agreement between town and lords provided that fugitive peasants had to be handed over to the nobel”

### **Aragon**

1100

[4]

Anderson (1974b, 169): “Aragonese frontier expansion was relatively less important, and serfdom was correspondingly more pronounced in its interior highlands.”

1350

[1]

Verlindin (1938, 119): “En Aragon les choses se sont passées autrement. En mai 1350, les Cortès se réunissent à Saragosse. Le résultat des délibérations fut consigné dans l'ordonnance que nous allons résumer. L'exposé des motifs déclare d'abord que les ouvriers qui sont employés par des tiers (4) demandent des salaires exagérés, ce qui est contraire à l'intérêt général. Suit alors un tarif des salaires. Les charpentiers et autres ouvriers de la construction qui travaillent le bois ou le plâtre ne pourront demander plus de 12 deniers par jour en plus de leur nourriture, ou bien 18 deniers en tout. Ils devront être pourvus des instruments de travail nécessaires. Même celui qui reçoit 18 deniers devra prendre ses repas à l'endroit où il travaille. En cas de contravention, 20 sous d'amende frapperont l'ouvrier et l'employeur. Le tiers de cette amende va au roi dans les endroits de realengo et aux seigneurs dans les autres localités. Un autre tiers est remis à l'accusateur, le dernier tiers étant réservé au conseil de la localité. Devant la justice, l'accusation peut être faite par un représentant du roi, du seigneur ou par un procureur de la commune.”

1481

[3]

Anderson (1974b, 208): “ In Aragon, on the other hand, where pastoralism had never been of much importance, towns were weak and a more rigid feudal hierarchy existed, repressive manorialism was not seriously shaken in the later Middle Ages, and glebe serfdom remained entrenched.”

### **Arneburg (Old Mark - small states)**

1435

[1]

Carsten (1954, 109): “When the castle of Arneburg, in the Old Mark, was pawned to a nobleman in 1435, it was stipulated that he could use the peasants’ services for his demesne; they should be announced by an official of the margrave according to his judgement, but the peasants should not be overburdened: yet the services were not limited, and the official might easily be partial.

### **Balkans**

1300s

[3]

Inalcik (1973, 12-13): “Ottoman expansion in the Balkans was aided as much by social as by political conditions. Recent research has shown that the decline of central power in the Byzantine Empire and its Balkan successor states was simultaneous with the rise of feudalism...By obtaining financial and legal concessions from the state, [Monasteries and influential persons] converted these lands into holdings with life tenure and they were able to increase the taxes and feudal dues extracted from the peasantry...The Ottoman regime thus established a centralized administration in place of feudal decentralization, and general regulations in place of the taxes and privileges that had been at the discretion of the feudal overlords.”

### **Bavaria**

1100

[4]

Anderson (1974, 164): “During fifty years of constant strife, a great social change now occurred in Germany: in the conditions of ruthless depredations, anarchy and social violence, the German aristocracy destroyed the allodial basis of the non-noble free population that had always predominated in Saxony and Thuringia and been a pervasive presence in Bavaria and Swabia. The peasantry was reduced to serfdom, as public and folk justice lapsed, feudal dues were exacted, and military obligations were intensified and codified between the members of the noble class itself, to whose ranks the ministeriales were now added, amidst the turmoil of the times and the high turnover of traditional families.”

1352

[2]

Anderson (1974b, 202): “The Cortes of Castile, assembled in Valladolid, decreed regulation of wages in the same year. The German princes soon followed suit: similar controls were imposed in Bavaria in 1352.”

### **Bernstein (New Mark - Teutonic)**

1487

[1]

Carsten (1954, 109): “In 1487 the burghers of the town of Bernstein, in the New Mark, promised to render their new lords, the von Waldow, services of four days in the year, and also to help them if they wanted to build.”

### **Bohemia**

1300

[0]

Anderson (1974b, 243): “In Bohemia, a denser network of urban colonization by German burghers occurred, based on the mining and metallurgical industries of the area, and with more significant participation by Czech artisans and traders.”

1437

[4]

Anderson (1974b, 256): “In 1437, three years after the defeat of Prokop at Lipan, the Land Court gave a ruling for the pursuit of fugitives; in 1453 the Snem reenacted the same principle; formal and legal adscription was then decreed by a Statute of 1497 and the Land Ordinance of 1500.”

1453

[4]

Anderson (1974b, 256): “In 1437, three years after the defeat of Prokop at Lipan, the Land Court gave a ruling for the pursuit of fugitives; in 1453 the Snem reenacted the same principle; formal and legal adscription was then decreed by a Statute of 1497 and the Land Ordinance of 1500.”

1487

[5]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the



sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

1497

[5]

Anderson (1974b, 256): “In 1437, three years after the defeat of Prokop at Lipan, the Land Court gave a ruling for the pursuit of fugitives; in 1453 the Snem reenacted the same principle; formal and legal adscription was then decreed by a Statute of 1497 and the Land Ordinance of 1500.”

1497

[6]

Fukuyama (2011, 377): “In the words of the historian Jenő Szűcs, ‘The regions beyond the Elbe paid, in the long run, for the West’s recovery... The legislative omens of the ‘second serfdom’ appeared with awesome synchrony in Brandenburg (1494), Poland (1496), Bohemia (1497), Hungary (1492 and 1498), and also in Russia (1497).’”

1497

[5]

Anderson (1974b, 256): “In Bohemia, the redistribution of land after the Hussite upheavals, which led to the dispossession of a Church which had hitherto owned one third of the cultivated surface of the country, produced enormous noble latifundia and a simultaneous quest for stable and dependent labour to work them.”

1680

[6]

Klima (1985, 196): “The increase in the incidence of labour services in Bohemia was real. According to the Feudal Labour Services Decree (*Robotpatent*) of 1680, a serf was obliged to perform labour services on the demesne of his lord for three days a week, but at hay-making and harvest time, and also at the fish harvest, the number of days could be increased by the lord ‘at will.’”

1738

[6]

Klima (1985, 198): “According to the Feudal Labour Services Decree of 1738, all serfs were required to perform labour services for their land, whether they had land or not, and the lord now found himself with far more labour at his disposal than he could fully utilize.”

1775

[6]

Klima (1985, 198-199): “According to the provisions of the 1775 Labour Services Decree, the working day throughout the six-month period from 1st October to 31st March was to be eight hours in duration and from 1st April to 30th September twelve hours.”

“The Labour Services Decree of 1775 thus placed by far the heaviest burden of labour service upon the better-off peasants and their obligations were indeed considerable.”

### **Bohemia (Habsburg)**

1627

[5]

Klima (1985, 194): “According to the Renewed Land Ordinance (*Verneuerte Landesordnung*) of 1627, the vast majority of the population of rural areas and tributary towns were tied to the soil and unable to move without the agreement and sanction of the lord.”

### **Bologna (Papal States)**

1257

[0]

Anderson (1974, 208): “Bologna, for example, had emancipated its serfs with a ringing declaration as early as 1257.”

1257

[0]

Epstein (2009, 15): “By the thirteenth century cities, such as Bologna in 1257, abolished all forms of serfdom.”

1376

[2]

Cohn (2007, 473): “Although Siena and Orvieto passed laws restricting the movement of peasants and limiting the rights of mezzadri in the year of the Black Death (even before Florence), such laws did not appear in the region of Bologna until 1376.”

### **Byzantine Empire**

1261

[3]

Kantorowicz (1956, 162-164): “Immunity privileges included partial or total exemption from taxes of the *pronoia* lord within in his estate...Since the formerly free peasants within the *pronoia* district had become *paroikoi*, more or less serfs, of the *pronoetes*, they came under his jurisdiction although that jurisdiction was restricted...After the reconquest of Constantinople by Michael Palaeologue in 1261, however, the *pronoia* system acquired new strength. It was then

that the *pronoia* estates became hereditary and began to resemble feudal principalities of Western pattern.”

## **Brandenburg**

1494

[6]

Fukuyama (2011, 377): “In the words of the historian Jenő Szűcs, ‘The regions beyond the Elbe paid, in the long run, for the West’s recovery... The legislative omens of the ‘second serfdom’ appeared with awesome synchrony in Brandenburg (1494), Poland (1496), Bohemia (1497), Hungary (1492 and 1498), and also in Russia (1497).’”

1518

[3]

Carsten (1954, 157): “In 1518, it was stipulated that runaway peasants had to be handed over, while peasants who had found a successor could leave freely with their children and settle in any town or village inside the country.”

1528

[5]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

1536

[3]

Carsten (1954, 157): “In 1536, it was added that no peasant was to be received anywhere without a written proof that he had departed with his lord’s consent.”

1540

[4]

Carsten (1954, 156): “In 1540, the nobility complained that they found it necessary to commute quit-rents into services, but that the peasants declined and were supported by the *Kammergericht*

in this attitude. The margrave decided that, if it was lawful that the peasants had to render services instead of paying quit-rents, this was to be done and their refusal was to be disregarded.”

1540

[4]

Carsten (1954, 157): “To prevent any appeals from their jurisdiction they demanded, in 1540, that any peasant complaining without cause about his lord to the *Kammergericht* was to be put into the dungeon, and this request was granted by the margrave ‘in order to deter them from complaining wantonly.’”

1550

[4]

Carsten (1954, 156): “In 1550 they protested that the *Kammergericht* was stipulating limited services and that the peasants were to receive food while serving. The margrave promised to remedy this: the peasants should serve according to custom and should receive food where this had always been the practice, unless they voluntarily forwent this right. He did not give way entirely to the nobility which was aiming at unlimited services.”

1562

[4]

Carsten (1954, 157): “In 1562 Margrave Joachim II decreed that the peasants should not be forced to perform unbearable and unc customary services.”

1620

[5]

Carsten (1954, 159): “From 1620 onwards the children of peasants and cottages, whose services were not needed by their parents had to serve their lord for three years; if they ran away they could be fetched back, and if need be arrested and imprisoned.”

1653

[6]

Anderson (1974a, 203): “In Brandenburg, the Great Elector and the Estates sealed the famous bargain of 1653, consigned in a formal Charter whereby the mobility voted for taxes for a permanent army, and the prince decreed ordinances binding the rural labour force irretrievably to the land.”

1653

[6]

Carsten (1954, 187): “The result of the prolonged negotiations was the famous *Recess* promulgated on the dissolution of the diet of 1653, which not only confirmed the old privileges

of the Brandenburg nobility, but also added important new rights to them. The elector achieved one of his aims, the grant of 530,000 talers, payable in small instalments over six years, and could thus raise a small standing army; but he had to forgo his other aim, the introduction of the excise and the reform of the antiquated system of taxation... Frederick William promised to preserve [the lords] private jurisdictions; peasants who complained wantonly could be imprisoned by their masters; peasants could be brought out if the nobleman in question had no demise or house, and they could be evicted *ob grave et enorme delictum*, but only after due inquisition and judgement, presumably by their lord himself, as he was the owner of the *jus primea instantiae*. These clauses merely confirmed the old privileges of the nobility. But a new clause was added which proved fatal to many peasants: *Leibeigenschaft* was to remain in force wherever it had been introduced and was customary; if a peasant against this custom wanted to prove his freedom, it would require bona fides and title on his side, or knowledge and forbearance of his lord. In other words, the peasant had to prove that he was not *leibeigen*, either by document which he was unlikely to possess, or through the even more unlikely co-operation of his master. Henceforth, the legal presumption was that he was *leibeigen*, at least in certain districts. The very fact that these were not specified opened up possibilities of future extension into new areas.”

## Castile

1351

[1]

Anderson (1974b, 202): “The Statutes of Labourers decreed in England in 1349- 1351, directly after the Black Death, are among the most glacially explicit programmes of exploitation in the whole history of European class struggle. The French Ordonnance of 1351 essentially repeated provisions similar to the English Statutes.<sup>11</sup> The Cortes of Castile, assembled in Valladolid, decreed regulation of wages in the same year.”

1481

[0]

Anderson (1974b, 208): “In Castilian conditions, glebe serfdom no longer had much economic rationale, and in 1481 the Cortes of Toledo finally granted serfs the right to abandon their lords, and thereby abolished their bonds of adscription.”

1351

[1]

Verlinden (1938, 127): “En Castille, des mesures générales pour le réajustement des prix et salaires n'ont été prises qu'en 1351, aux Cortès de Valladolid.”

## **Castile and Leon**

1000

[4]

Anderson (1974b, 169): “From the turn of the I I th century onwards, there was a considerable extension of seigneurial estates and large domains in Castile and Leon.<sup>22</sup> Castilian solariegos or villeins were by no means negligible from this time onwards, but they never constituted a majority of the rural population.”

## **Catalonia**

By 1100

[4]

Anderson (1974b, 168): “The exception to the general pattern was to be Catalonia, which was incorporated into the Carolingian realm in the 9th century and consequently underwent the standard experience of vassi dominici, the benefice system and comital administration.”

1486

[0]

Bush (1996, 220): “Yet the willingness of the royal courts to recognize customhold as well as freehold certainly helped to phase out the servile tenure; and, exceptionally, in late fifteenth-century Catalonia, serfdom was abolished by government decree.”

## **Catalonia (Aragon)**

1349

[1]

Verlinden (1938, 143): “Ces ordonnances destinées à obvier à la situation troublée consécutive à la peste sont promulguées en 1349 en Catalogne, en 1350 en Aragon et en 1351 en Castille.”

## **Culmerland**

1407

[1]

Carsten (1954, 103): “At the urgent request of the nobility of the Culmerland the first decrees fixing maximum wages for servants and labourers in whole districts were issued about 1407, applying to the Culmerland and the three Werder at the mouth of the Vistula, which were among the chief corn-producing districts of Prussia.”

## **Denmark**

1733

[4]

Horstboll and Ostergard (1990, 161): The *stavnsband* system forbade males between the age of 4 and 40 to leave the estate where they had been born and registered for military service. Its

purpose was to ensure that the large estates had a stable supply of cheap labour and those hardest hit by the system were the landless labourers.

1733

[4]

Ostergaard (2006, 63): “In 1788 the Danish equivalent of serfdom, the *Stavnsbånd* (“adscription”) was abolished. (This had been a peculiar form of servitude binding peasants to estates where they were born, enforced as of 1733 by the state on tenant peasants; oppressive serfdom, in the East-Elbanian sense, had never made it further north than Holstein.)”

1788

[1]

Ostergaard (2006, 63): “In 1788 the Danish equivalent of serfdom, the *Stavnsbånd* (“adscription”) was abolished. (This had been a peculiar form of servitude binding peasants to estates where they were born, enforced as of 1733 by the state on tenant peasants; oppressive serfdom, in the East-Elbanian sense, had never made it further north than Holstein.)”

“The *Stavnsbånd* was to be terminated in states that would leave all peasants completely free by 1800, but the year 1788 was from the beginning seen as the point of no return for the agrarian reforms in particular, and the whole complex of reforms as well.”

### **East Pomerania**

1616

[5]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

## England

1066

[4]

Anderson (1974b, 164): “A full feudalism, delayed so long in Germany, now finally arrived in the 12th century. But it was constructed against monarchical integration of the country, by contrast with England where the feudal social hierarchy was itself installed by the Norman monarchy....”

1349

[2]

Gregg (1976, 84): “In face of these rising prices, of the decay of agriculture and a weakening of the bonds of society as villeins left their manors and bands of unattached labourers wandered over a country fearful and appalled at the ravishes of the plague, the King's Council proclaimed the Ordinance of Labourers of 18th June 1349. It laid down that all able-bodied men and women under the age of sixty years, free or servile, having no means of support, should work when required; that all labourers should accept the wages paid in 1346 or in the five or six years before; that none should break an agreement made on these terms; that none should offer or demand higher wages.”

1351

[2]

Cohn (2007, 462): “Around the turn of the twentieth century, Morisseaux and Levasseur saw the labour legislation passed by King John II in February 1351 (two articles [titres] of which attacked the Parisian guild monopolies) as anti-corporatist, even a precursor of nineteenth-century laissez-faire doctrine.”

“Lastly, in his study of artisans and labour in fourteenth- and fifteenth-century Paris, Geremek analysed the wages of masters and their 'aids' with the construction of the hospice and hospital of Saint-Jacques in Paris from 1340 to 1360, and argued that John's law was ineffectual: despite the 1351 law freezing masons' wages at pre-plague rates, from 1351 to 1355 they climbed fourfold.”

1351

[2]

Gregg (1976, 84-85): “But there was no improvement in the situation and the seriousness of the labour problem was one of the reasons for summoning Parliament, which supplemented the Ordinance by the Statute of Labourers of 9th February 1351. This made the law more precise, and fixed many wages at definite levels.”



1360

[3]

Gregg (1976, 261): “One of the first methods of making the distinction was laid down in the Ordinance of 1360 which prescribed the branding of the sturdy beggar with the letter F for felon.”

1377

[3]

Martin (1983, 73, 75): “In 1377, in twenty parishes in counties such as Hampshire, Wiltshire, Surrey and Berkshire, villeins laid claim to ancient demesne status. At the same time there was trouble in Dorset, Devon and Somerset. This unrest caused the House of Commons in October 1377 to petition the King to act to prevent a peasant rising on the scale of the Jacquerie.”

75: “This was reflected in legislation in two spheres: (1) wage labour the Statutes of Labourers, 1349-51; and (2) the extraction of rent - the 1377 ordinance regarding claims of ancient demesne and refusal of services....The ordinance of 1377 and subsequent commissions of Oyer and Terminer in the period 1377-80 constituted centralised controls over an increasingly assertive peasantry.”

1388

[3]

Cohn (2007, 476): “In fact, new English labour laws in 1360-1, 1388, and 1406 increased its regulations with stiffer penalties on rural labourers and curtailed their social and geographic mobility with harsher controls.”

1388

[3]

Gregg (1976, 261-262): “The Act of 1388 decided that it should be in the town where a man was born, the place where he was resident at the time of the promulgation of the Act, the town whence he came, or some other town within the hundred, rape or wapentake. The offence for not removing to one of these places within forty days of the proclamation of the Statute was the stocks or imprisonment, as well as forcible ejection. The legitimate traveller needed to carry with him a letter, sealed with the kin’s seal and imprinted with the name of the town or village where it was issued, stating the reasons for his journey. The seal was in the charge of the J.P. or some approved man of the district, and the cost of making, sealing, and delivering the letter was limited to one penny. A person on the move at the end of the fourteenth century would thus be examined for the tell-tale letter F and asked to produce the mitigating sealed letter. The possession of the one, or lack of possession of the other, would land him in the stocks or in prison.”

1400

[2]

Anderson (1974b, 206): “The lords both needed cash and, beyond a certain point, could not risk driving their peasants wholesale into vagrancy or urban employment. They therefore were compelled to accept a general relaxation of servile ties on the land... This process developed earliest, and farthest, in England, where the proportion of free peasantry had always been relatively high; there servile customary tenures had become silently converted into non-servile leases by 1400, and villeinage had passed over into copy-holding.”

1600s

[0]

North and Thomas (1973, 155): “Over the seventeenth century therefore we see the creation of the first patent law to encourage innovation; the elimination of many of the remnants of feudal servitude, replacing the old regulated company....”

1360-1, 1406

[2]

Cohn (2007, 477): “In fact, new English labour laws in 1360-1, 1388, and 1406 increased its regulations with stiffer penalties on rural labourers and curtailed their social and geographic mobility with harsher controls.”

### **Ermland (Prussia - Teutonic)**

1389

[1]

Carsten (1954, 64): “When the peasants of an episcopal village in the Ermland in 1389 disputed their obligation to render labour services, the arbiters decided that they were a custom of the country... These labour services had to be rendered instead of the public services which were no longer required by the Order. From the peasants’ point of view this was no aggravation, as the labour services were fixed at a low level, which the public services by their nature had been unlimited.”

1442

[1]

Carsten (1954, 105): “The peasants’ legal position, however, continued to deteriorate. The noblemen demanded that they should only be permitted to leave with the written consent of their lord and after having provided a successor”

## **Flanders**

1200

[0]

Postan (1970, 169): “Flemish, who were already free in the 12<sup>th</sup> century, had to be offered conditions of free tenure if they were to be enticed to move east which then led to freedom for the other colonists.”

## **Florence**

1349

[1]

Cohn (2007, 468): “The first labour laws to pass through Florence's councils of the *Popolo* and *Comune* (6 August 1349) imposed more stringent restrictions on labourers with fiercer fines than any of the royals' laws reviewed above and may have been the most repressive labour laws enacted anywhere in post-plague Europe.”

1427

[0]

Cohn (2007, 473): “With the progressive *Catasto* of 1427, Florence taxed all peasants according to the same principles regardless of location or the concentration of holdings held by Florentine.”

## **France**

900

[5]

Anderson (1974b, 156): “France, as the central homeland of European feudalism, can be dealt with relatively briefly. Northern France, in effect, always conformed more closely to the archetypal feudal system than any other region of the continent.”

1300

[3]

Anderson (1974b, 189): “In certain areas, especially perhaps Northern France, communities of peasants and villages purchased enfranchisement from lords anxious to realize their revenues in cash.”

1351

[2]

Anderson (1974b, 202): “The Statutes of Labourers decreed in England in 1349- 1351, directly after the Black Death, are among the most glacially explicit programmes of exploitation in the whole history of European class struggle. The French Ordonnance of 1351 essentially repeated provisions similar to the English Statutes.”

1460

[2]

Anderson (1974b, 207): “On the continent, there was generally a somewhat slower evolution from labour services to rents in kind, and then to money rents. This was true both of France, where the final effect of the Hundred Years’ War was to leave the peasant in possession of his plots, and of South-Western Germany.”

1600s-1700s

[1]

Downing (1993, 248): “Turning now to the French Revolution, it might be asked exactly what was overthrown in 1789. The simple answer of feudal authority will not do; most of that was abolished by the Bourbon state in the previous century. Seigneurial authority survived in the countryside, but even here the relationship was less that of lord and serf than that of exploitative capitalist rentier and tenant. The countryside at this point was at least as capitalist as it was feudal, probably more so.”

1789

[0]

O’Rourke (2017, 428): “The depth of the crisis in the countryside prompted the extraordinary session of the National Assembly on August 4, 1789. In a highly charged emotional atmosphere, noble deputies proposed the abolition of the entire feudal system.”

## **Genoa**

Pre-Black Death

[0]

Epstein (2009,53): “Peasants in the valleys around Genoa saw nobles living in castles who usually controlled the best lands...The tenants often had their own lands, and in the valleys it was rare for a man or woman to owe labor -- this was more common in the fertile plains and river valleys.”

## **Hungary**

1492

[6]

Fukuyama (2011, 377): “In the words of the historian Jenő Szűcs, ‘The regions beyond the Elbe paid, in the long run, for the West’s recovery... The legislative omens of the ‘second serfdom’ appeared with awesome synchrony in Brandenburg (1494), Poland (1496), Bohemia (1497), Hungary (1492 and 1498), and also in Russia (1497).’”

1498

[6]

Fukuyama (2011, 377): “In the words of the historian Jenő Szűcs, ‘The regions beyond the Elbe paid, in the long run, for the West’s recovery... The legislative omens of the ‘second serfdom’ appeared with awesome synchrony in Brandenburg (1494), Poland (1496), Bohemia (1497), Hungary (1492 and 1498), and also in Russia (1497).’”

1514

[5]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

1514

[5]

Macek (1982, 19): “After the defeat of the peasant war in Hungary (the rising), the diet decided in 1514, on the basis of earlier practice, to impose *corvée* for the overlord one day in every week.”

18-10: “Recent research has shown that the class struggle at the end of the fifteenth century was far from the intensity it had reached in the early stages of the Czech reformation and during the Hussite revolution in Bohemia, or in Germany in 1525-26 and Hungary in 1514”

1547

[0]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the

seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

1608

[5]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

## **Italy**

1200

[0]

Anderson (1974, 166-167): “Rural relations were radically altered by the spread of the *contado*, for the towns tended to introduce new forms of semi-commercialized dependence for the peasantry that were a considerable remove from serfdom: *meqadria* or contractual share-cropping became customary over much of North and Central Italy by the 13th century.”

## **Lithuania**

1588

[2]

Hellie (1971, 4): “Article 13 of chapter 12 of the Lithuanian Statute of 1588, a law code known to have had a significant impact on Russia, defined a “long-time resident” (*starozhilets*) as a person who had lived in the same place for ten years or more; such a person lost the right to move through disuse of the right.”

## **Livonia**

1561

[5]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by

government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

### **Mecklenburg**

1654

[5]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

### **Moldavia**

1606

[4]

Kalman (2002, 30): “The inhabitants of the Hungarian Csango villages in Moldavia lived as free farmers. Hungarian villages, unlike Romanian, were not subordinated to landlords; they were 'razas'... They were subordinated directly to the voivod [king], and had to deliver a determined portion (quota) of their produce to him. They were entitled to address complaints to the voivod himself, who adjudicated their disputes and quarrels. ... Voivod Jeremias Movila, with a charter dated 12 May 1606, donated the villages Szabofalva/Sabaoani and Berendfalva/Berindesti to the Greek Orthodox monastery of Secul. Consequently the inhabitants became serfs.”

### **Naples and Sicily**

1100

[4]

Anderson (1974, 167): “Much more formidable was the Southern kingdom of Naples and Sicily, which the Normans had created after their conquests from the Byzantines and the Arabs in the

11th century. There, fiefs were distributed and a true baronial system emerged, complete with appanages and serfdom; the monarchy which ruled over this southern simulacrum of the French synthesis was, if anything, strengthened by orientalised conceptions of royal paramountcy due to lingering Arab and Byzantine influences.”

### **New Mark (Teutonic)**

1412

[1]

Carsten (1954, 78): “In the New Mark peasants of the von Uchtenhagen had to serve 3 days yearly in 1412.”

1572

[3]

Carsten (1954, 159): “The Junkers also appropriated meadows hitherto used for grazing by the peasants: in the New Mark this practice was sanctioned by Margrave John George in 1572.”

### **Normandy**

1302

[0]

Epstein (2009, 247): “In fifteenth century Normandy, serfdom persisted and varied long after its official end in 1302”

1400s

[2]

Epstein (2009, 247): “In fifteenth century Normandy, serfdom persisted and varied long after its official end in 1302”

### **Northern Italy**

1300

[0]

Anderson (1974b, 208): “In Italy, the Communes had nearly always consciously combatted seigneurial jurisdictions by separating the functions of lord and landlord in their condo.”

### **Northern Netherlands**

1100

[0]

Anderson (1974b, 242): “The Northern Netherlands, however, was a corner of Europe which had never known a proper manorial system, and whose peasantry were already much freer from servile dues than the French, English or German counterparts in the 12th century.”



## **Novgorod**

1610

[5]

Hellie (1971, 110): “The interests of the manatees in the peasant question, as the Time of Troubles was nearing its climax, can be seen in the 1610 agreement negotiated with the Poles... It forbade peasant vykhod, but said nothing about vyvoz, or otkaz, which would include both.”

## **Old Mark**

1485

[2]

Carsten (1954, 110): “Still another year later [1485] it was ordained in the Old Mark that a peasant had to find a successor before he was permitted to leave, exactly as it had been stipulated in Prussia seventy years earlier. The tying of the peasants to the soil had begun.”

1487

[3]

Carsten (1954, 109): “In 1487 it was declared that the two noblemen who owned the jurisdiction in an Old Mark village were entitled to demand labour services: to prevent its desertion the peasants should not be burdened too heavily. Again the amount of services was not stipulated, so that it seems that the noblemen could impose them at will.”

1540

[3]

Carsten (1954, 155): “In Brandenburg the nobility of the Old Mark in 1540 referred to an old custom which, they maintained, permitted them to buy out peasants to enlarge their demesnes and asked for confirmation of this right...Margrave Joachim II fulfilled their wish and granted them the rights of buying out disobedient and unruly peasants, and of founding a new noble residence on peasant land; this last concession was at first limited to the Old Mark but later extended to the whole country.”

## **Old Mark near Stendal**

1433

[1]

Carsten (1954, 78): “In the Old Mark peasants of a village near Stendal in 1433 had to serve a burgher of that two 2 days in the year, but only when it was convenient and he required it.”

## **Ottoman Empire (in Europe)**

c.1541

[4]

Inalcik (1973, 107-112): “The typical Ottoman province was one where the *timar* system was in force....It therefore became the established practice to assign state agricultural revenues to the troops, who collected them directly, in place of salary...similarly military fiefs in the Byzantine Empire were known as *pronoia*, whose Persian equivalent is *timar*...[The Peasant] owed, in addition, labour on the fief-holder's land and services with his cart. This is the system which the Ottomans found when they conquered the Balkans...The peasant...could not change his status until a new cadastral survey. Superficially, the *timar* system resembles mediaeval European feudalism, but there are fundamental differences between the two. To implement the *timar* regime the state had to establish its own absolute control of the land, unimpeded by any private property rights...The peasant, for his part, undertook to work the land continuously and to pay the prescribed taxes...It, with no reason, he left the land vacant for three years, the *sipahi* could give it to another. If anyone settled on vacant land within the boundaries of the *timar*, the *sipahi* (lord) received from him the legally established taxes...The *sipahi* whose *reaya* (peasants) fled lost his income, and for this reason the law forbade *reaya* to leave their settlements and go elsewhere. The *sipahi* had fifteen years in which to compel a fugitive peasant to return to his land, but to do this he needed a *kadi's* decree. If someone else, who paid the tithe, came and worked the deserted land, the *sipahi* could not force the peasant to return but only claim from him the *cift resmi* (tax). If the peasant entered a craft in a town, he had to pay the *sipahi* compensation....The *kanunname* of each *sanjak* listed the taxes and services due from the peasants and the *sipahi* could not impose any others...Thus the *reaya* were undoubtedly in a happier position than the serfs of mediaeval Europe, the main difference lying in the fact that the Ottoman peasant lived under the protection of a centralized state and its independent legal system.”

### **Penkum**

1480

[6]

Carsten (1954, 99-100): “It was only in the fifteenth century, however, that the rulers’ jurisdiction finally disappeared...The same applied to the estates of noblemen: in 1454 the duke of Pomerania sold his castle of Torgelow with the *advocatia* belonging to it, in 1480 the town of Penkum, and in 1483, the castle and town of Zanow, in both cases with the jurisdiction of life and limb which hitherto had been a ducal right.”

### **Piedmont**

1100

[4]

Anderson (1974b 167): “Piedmont, abutting onto Savoy, was a frontier territory across the Alps: a seignorial hierarchy and a dependent peasantry did develop in these uplands, beyond the influence of the communes on the plains.”

### **Poland**

1300

[0]

Anderson (1974b, 243): “Piedmont, abutting onto Savoy, was a frontier territory across the Alps: a seigneurial hierarchy and a dependent peasantry did develop in these uplands, beyond the influence of the communes on the plains.”

1496

[5]

Anderson (1974a, 281-282): “Meanwhile, it was in this period too that the legal enserfment of the Polish peasantry was decreed. The Statutes of Piotrkow in 1496 banned all labour movement from villages with the exception of a single peasant from each community a year.”

1496

[5]

Fukuyama (2011, 377): “In the words of the historian Jenő Szűcs, ‘The regions beyond the Elbe paid, in the long run, for the West’s recovery... The legislative omens of the ‘second serfdom’ appeared with awesome synchrony in Brandenburg (1494), Poland (1496), Bohemia (1497), Hungary (1492 and 1498), and also in Russia (1497).’”

1501

[5]

Anderson (1974a, 281-282): “Meanwhile, it was in this period too that the legal enserfment of the Polish peasantry was decreed. ... They were followed by further measures of adscription in 1501, 1503, 1510, and 1511: signs of the difficulties in implementation”

1503

[5]

Anderson (1974a, 281-282): “Meanwhile, it was in this period too that the legal enserfment of the Polish peasantry was decreed. ... They were followed by further measures of adscription in 1501, 1503, 1510, and 1511: signs of the difficulties in implementation”

1510

[5]

Anderson (1974a, 281-282): “Meanwhile, it was in this period too that the legal enserfment of the Polish peasantry was decreed. ... They were followed by further measures of adscription in 1501, 1503, 1510, and 1511: signs of the difficulties in implementation”

1511

[5]

Anderson (1974a, 281-282): “Meanwhile, it was in this period too that the legal enserfment of the Polish peasantry was decreed. ... They were followed by further measures of adscription in 1501, 1503, 1510, and 1511: signs of the difficulties in implementation”

1520

[6]

Anderson (1974a, 282): “Finally in 1520, an ordinance governing feudal dues was passed which imposed labour services of up to 6 days a week on the Polish *wloka* or villein.”

1520

[6]

Macek (1982, 19): “According to the Toruń-Bydgość statute of 1520, the vassal was obliged to work at least one day of the week on his master's land.”

1496

[5]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

## **Pomerania**

By 1300

[0]

Anderson (1974b, 243): “Thus the condition of the native peasantry in Poland, Bohemia, Silesia, Pomerania and elsewhere, which had been dipping downwards towards serfdom before the onset of the German colonization, now registered a recovery by assimilation to that of the newcomers; while the Prussian peasantry initially enserfed by the Teutonic Order were emancipated in the course of the succeeding century.”

1480

[6]

Carsten (1954, 99-100): “It was only in the fifteenth century, however, that the rulers’ jurisdiction finally disappeared... The same applied to the estates of noblemen: in 1454 the duke of Pomerania sold his castle of Torgelow with the *advocatia* belonging to it, in 1480 the town of Penkum, and in 1483, the castle and town of Zanow, in both cases with the jurisdiction of life and limb which hitherto had been a ducal right.”

1484

[3]

Carsten (1954, 110): “In the following year [1484], the assembly of the lords demanded that nobody should harbour a peasant, cottager, or servant who had left without his master's consent, but should surrender him if required to do so.”

1529

[3]

Carsten (1954, 175): “In 1529 Margram Joachim I concluded a treaty with the dukes of Pomerania by which he renounced his claims to the feudal overlordship over it and received in exchange a guarantee of the right of succession of his house if the ducal family of Greifen were to fail.”

### **Pomerania-Wolgast**

1645

[7]

Carsten (1954, 163): “In the other duchy, Pomerania-Wolgast, the Estates in 1618 demanded that the same regulations [as those of the 1616 Pomerania-Stettin regulation] be introduced but this was only done in 1645 when western Pomerania had become a Swedish possession.”

### **Pomerania-Stettin**

1616

[7]

Carsten (1954, 162-163): “In 1616 the new regulations for the peasantry of Pomerania-Stettin were finally published: all the peasants, without exception, were declared ‘*leibeigen, homines proprii et coloni glebae adscripti*,’ they and their sons were forbidden to leave without a permit and formal manumission; they were liable to unlimited labour services; their fields and meadows belonged solely to their lord so that they had no hereditary rights whatever; the lord could take the farm away or put the peasant on another farm; but if a peasant was evicted and not given a new farm, then he could ask for his and his children’s release and could take the stock of the farm with him; even the sons of free peasants, village mayors, innkeepers, and millers were liable to serfdom; everybody was strictly forbidden to accept a peasant without a writ of release from his lord.”

## **Portugal**

1095

[3]

Anderson (1974b, 171): “Portugal, on the far Atlantic edge of the Iberian peninsula, was the last important feudal monarchy to emerge in Western Europe.”

1200

[0]

Anderson (1974b, 172): “On the other hand, glebe serfdom was disappearing as early as the 13th century, at least in part because of the abundance of Muslim captives in the South; while maritime trade with England and France was already growing significantly. At the same time, the importance of the military religious orders for the social pattern of mediaeval Portugal was even greater than in Spain.”

1375

[2]

Anderson (1974b, 202): “The Portuguese monarchy passed its laws of the szismarias two decades later, in 1375. However, this seigneurial bid to reinforce servile conditions and make the producing class pay the costs of the crisis now met with wild, violent resistance - often led by better educated and more prosperous peasants, and mobilizing the deepest popular passions.”

## **Prussia**

1300

[0]

Anderson (1974b, 243): “Thus the condition of the native peasantry in Poland, Bohemia, Silesia, Pomerania and elsewhere, which had been dipping downwards towards serfdom before the onset of the German colonization, now registered a recovery by assimilation to that of the newcomers; while the Prussian peasantry initially enserfed by the Teutonic Order were emancipated in the course of the succeeding century.”

1526

[5]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the

seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

1612

[7]

Carsten (1954, 160): “New regulations for servants and menials were published in 1612 and in 1633. According to these, the peasants’ children had to serve at their lord’s will; if they ran away they could be imprisoned, and in case of a second offence they could be flogged.”

### **Prussia (Teutonic)**

Circa 1300

[0]

Downing (1993, 87): “In East Prussia, the numerous free peasantry (Kölmer) participated in councils that debated local issues and drew up agendas for upcoming meetings of the estates.”

1406

[1]

Abel (1980, 53): “In Tirol (1352), Saxony (1466 and 1482) and the estates of the Teutonic Order of Knights (from 1406) the landlords established regulations to that end.”

1412

[3]

Carsten (1954, 103): “Significantly, it was immediately after the first war against Poland, in 1412, that the Prussian nobility demanded for the first time that no peasant or cottager should be received in any town who could not prove that he had left with his lord’s consent; all those without fixed domicile should be driven out of the towns at harvest time. Their demands were incorporated in the same year into the ordinances issued by the Grand Master Henry von Plauen.”

1417

[4]

Carsten (1954, 103-104): “Another way to secure the necessary farm-hands at a time of increasing shortage of labour was to stipulate compulsory maximum wage-rates... These regulations were extended to the whole of the country in 1417... They were binding on employers and employees alike; the landlords were enjoined not to entice away each other’s servants, a practice about which there were many complaints. A runaway servant had to be surrendered wherever he was found, had to work for one year without pay, and to pay a fine of three marks, almost equivalent to another year’s wages. Prussians were not to be received as servants or inhabitants in any town or German village.”

1427

[4]

Abel (1980, 65): “The state ordinances of 1427, 1441, 1444, and 1445 had laid it down that if a tenant farmer turned his inheritance over to dependable hands in a satisfactory condition and at the right time, and paid his lord all he owed him, ‘he could move to wherever he wanted.’”

1427

[4]

Carsten (1954, 104): “In 1427 the Grand Master Paul von Rusdorf forbade the commanders of the Order to use carrying services in their forestry and fishery and to demand unc customary labour services”

1441

[4]

Abel (1980, 65): “The state ordinances of 1427, 1441, 1444, and 1445 had laid it down that if a tenant farmer turned his inheritance over to dependable hands in a satisfactory condition and at the right time, and paid his lord all he owed him, ‘he could move to wherever he wanted.’”

1444

[4]

Abel (1980, 65): “The state ordinances of 1427, 1441, 1444, and 1445 had laid it down that if a tenant farmer turned his inheritance over to dependable hands in a satisfactory condition and at the right time, and paid his lord all he owed him, ‘he could move to wherever he wanted.’”

1445

[4]

Abel (1980, 65): “The state ordinances of 1427, 1441, 1444, and 1445 had laid it down that if a tenant farmer turned his inheritance over to dependable hands in a satisfactory condition and at the right time, and paid his lord all he owed him, ‘he could move to wherever he wanted.’”

1445

[4]

Carsten (1954, 105): “It was then stipulated in the ordinance of 1445 that nobody was to receive a peasant without a ‘letter’ from his lord; if anyone did so, he was to hand over the peasant and pay his arrears. But the peasant was still free to leave if he provided a successor approved by his master; if the latter then refused to give him the ‘letter,’ the peasant could obtain it from the local official of the Order after du investigation. Yet this stipulation neither prevented the towns from recieving peasants, nor the landlords from filling their deserted holding at each other’s cost.



1494

[5]

Carsten (1954, 106): "This state of affairs was reflected in the ordinances of 1494. A runaway peasant had to be handed over to his master who could have him hanged; a runaway servant was to be nailed to the pillory by one ear and to be given a knife to cut himself off; no servant was to go idle for more than a fortnight after the end of his employment, but was to accept new service: all this apparently without any trial or arbitrament."

1503

[5]

Carsten (1954, 106): "The ordinances of 1503 even stipulated that a servant idle for longer than thirteen days was to be arrested and handed over to his lord who could put him into chains or make him serve one year without pay."

1526

[6]

Carsten (1954, 151): "The Prussian ordinances of 1526 reflected the growth of noble power, the defeat of the peasants in the preceding year, and the dependence of the duke upon the nobility. It was no longer mentioned that the peasant could depart freely having provided a successor to take over the holding; it was simply stipulated that no peasant or peasants son was to be accepted by any lord or Junker without a written permit from his former lord. The peasants' children, before accepting other service, had to report to their lord and serve him for the due wages if required to do so. A peasant also needed a permit if he wanted to undertake work outside the estate. If a peasant continually neglected his holding it could be given to another peasant: 'continuous neglect' was not defined, nothing was said about what was to happen to the evicted peasant, and no legal safeguards protected the peasant against his lord. German and Prussian peasants were treated alike in these ordinances, and even the Prussian freemen hardly better than the peasants; the legal position of these groups more and more approximated. Thus the peasants and their sons were tied to the soil, and their hereditary right of possession was infringed for the first time."

1540

[6]

Carsten (1954, 151-152): "By the ordinances of 1540 the Prussian freemen's right of bequeathing their farms was severely curtailed; if there was no heir the freeman could not dispose of the farm and its stock; if there were several sons, the lord could select one of them as the heir, while the others, if they wanted to leave had to pay a ransom and lost their rights of inheritance. The Prussian peasants' right of inheritance was limited to movable goods, but the stock of the farm and what served to maintain it were excluded. The condition of freemen and peasants alike was deteriorating quickly. The same was the case in Pomerania"

1577

[7]

Carsten (1954, 159): “Some further aggravations were introduced by the ordinances of 1577: the peasants' daughters were also tied to the soil; before leaving they had to pay a ransom, and freedom of marriage ceased to exist. Furthermore, the noblemen were empowered to compel a peasant's child to serve them and to punish parents and child if the parents withheld him without reason, or if the child refused to serve. Neither the length of this service nor the age of the children liable was stipulated. The noblemen were merely admonished not to take away those children needed by the peasants themselves.”

### **Putlitz (Priegnitz) - Brandenburg - small state**

1492

[1]

Carsten (1954, 109-110): “In 1492 the burghers of Putlitz, in the Priegnitz, were 'on request' obliged to serve the Gans von Putlitz; the latter promised not to ask them for too many named and unnamed services, but their amount was not stipulate.”

### **Romania**

Late 19th century

[4]

McGowan (1994, 683): “Not until the late nineteenth century did Rumanian labor dues equal those already common under the Russian and Habsburg systems.”

### **Russia**

1448

[2]

Hellie (1971, 82): “The recent consensus has been that the introduction of *Iur'ev Den'* was the result of petitions by the elders of two Beloozero monasteries (Kirillov, which was to become one of the largest in Russia, and Ferapontov, both founded in the 1390s, about 300 miles north of Moscow) to the appanage prince of Beloozero-Vereia, Mikhail Andreevich, in the years 1448-70.”

1455

[3]

Hellie (1971, 81): “The first known restriction of peasant mobility was made by the Muscovite Great Prince Vasilii Vasil'evich some time between 1455 and 1462, when he granted the Troitse Sergiev monastery both the right to prevent long-time residents (*starozhil'tsy*) on its estates in

Bezhetetskii Verkh and Uglich from moving elsewhere, and the right to recover those who had moved.”

1488

[3]

Hellie (1971, 83): “In a grant (1488-90) concerning the peasants of the Kirillov monastery of Beloozero, Ivan introduced the concept of vyvoz: the debts of a peasant could be paid off by another lord and the debtor moved (the issue of consent was not raised) only during the appointed St. George's Day time limit.”

1497

[3]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

1497

[3]

Hellie (1971, 84): “The St. George's Day rule became general for all the peasants in the Muscovite state after its codification in the *Sudebnik* of 1497. The right to move was also made contingent upon the payment of a small rent fee. It is well to remember that at least until 1497 there was no universal restriction on mobility for the peasants in Russia, for a 1496 treaty between the two princes of Riazan' equated peasants with people of the upper classes who still had the right to move. Why this limitation was made universally applicable to all peasants in 1497 has never been satisfactorily explained.”

1550

[3]

Hellie (1971, 87): “The *Sudebnik* of 1550 repeated the provisions of the *Sudebnik* of 1497 that allowed peasants to relocated during the two-week St. George's Day period after paying taxes and the “rent” fee. ”

1581

[5]

Anderson (1974a, 332): “In a desperate attempt to stem this social chaos, Ivan IV banned all peasant movements in 1581, closing the St. George’s period for the first time; the decree was expressly an exceptional one, covering a specific year, although it was repeated irregularly later in the decade”

1589

[6]

Hellie (1971, 116)

1592

[7]

Anderson (1974a, 333): “It was against this background that, in order to rally gentry support, Godunov issued a decree in 1592 of 1593 banning all peasant movements until further notice, thereby lifting any temporal restrictions from adscription to the soil...It was promptly followed by a widespread increase in labour services, and legal measures closing entry from lower social groups into the *pomeshchik* class.”

1606

[7]

Hellie (1971, 107): “In February, 1606, a decree issued by the pretender Dmitrii I, trying to carry out his promises to his supporters in the lower classes to ease their lot, repeated the five-year limit on suits to recover fugitive peasants. The decree added that peasants who had fled because their lords had refused to feed them during the famine of 1601-3 could not be returned to their former lords against the peasants' will... According to the 1606 decree, which was an answer to a petition from the boyars and dvorians, the peasant who had fled within the previous five years (and five months), but not because he had been starving, and who had taken a bondage loan contract on himself, was to be returned as a peasant if his former lord sued for his return.”

“Fearing the peasant revolt then going on, the False Dmitrii I, in the spring of 1606, included the right of peasants to change lords on St. George's Day in the so-called Composite Law Code (*Svodnyi Sudebnik*), which was based on the earlier *Sudebnik*.”

1606

[7]

Hellie (1971, 117)

1607

[8]

Hellie (1971, 108): “One of the most interesting documents in the development of serfdom in Russia was issued in March, 1607, by Tsar Ivan Shuiskii. This law introduced a police element into what previously had been largely a civil matter.”

“If a lord did not petition for his fugitive peasants before September 1, 1607, he would lose claim to them and they would then be registered with the lord with whom they were living.”

1610

[8]

Hellie (1971, 109): “A fifteen year limit was placed on all future suits for fugitive peasants—the amount of time which had elapsed between this decree of 1607 and the decree of 1592-93 posited by V. I. Koretskii.”

1610

[8]

Hellie (1971, 110): “The interests of the manatees in the peasant question, as the Time of Troubles was nearing its climax, can be seen in the 1610 agreement negotiated with the Poles... It forbade peasant vykhod, but said nothing about vyvoz, or otkaz, which would include both.”

1611

[8]

Hellie (1971, 110): “The contemporary attitude of the *deti boiarskie* and *dvoriane* can be observed in the June 30, 1611, decree of the first militia formed by members of the middle service class to drive the Poles out of Russia. Article 23 of this document ordered the return of fugitive and “abducted” peasants to their proper lords without any time limit being specified.”

1612

[8]

Hellie (1971, 110): “A somewhat different position prevailed in a treaty signed by the boyars of Novgorod and representatives of the Swedish king, Gustavus Adolphus, in late 1612. Peasants living on court lands were not to be permitted to move away, nor were any peasants to move into the court villages until further notice, except in the case of “free people.””

1613

[8]

Anderson (1974a, 334): “By 1613, the aristocracy had closed ranks sufficiently to elect the young boyar Michael Romanov to become Emperor... Energetic recovery of fugitive peasants, including those who had enrolled in the anti-foreign militias of the Time of Troubles, was implemented by the new government in response to gentry demands, as economic production revived.”

1619

[8]

Anderson (1974a, 334): "The Patriarch Filaret, Michael's father, who became the real ruler of the country in 1619 provided further emollients to the *pomeshchik* class by handing over to it black-earth peasant lands in the North."

1620

[8]

Hellie (1971, 53): "In 1620 Filaret commenced a massive distribution of peasant black lands to the service class, a distribution which was to continue until mid-century. The purpose initially was to enable more cavalymen to render service, though in time many of the grants served simply to enrich the "strong people.""

1621

[8]

Hellie (1971, 121): "A document of 1621 instructed the military governor of Cherdyn to return fugitive peasants to their old plots."

1624

[8]

Hellie (1971, 119): "In 1624 the peasants of Sol'vychevodsk were told that they could no longer dispose of their own property."

1628

[8]

Hellie (1971, 118): "The status of the peasant was lowered still further under Filaret in 1628 with a decree on the disposition of peasants' property by the Robbery Chancellery (*Razboinyi Prikaz*) and the Moscow Administrative Chancellery (*Zemskii Prikaz*) as a part of the new "Decree on Court Cases.""

1629

[8]

Hellie (1971, 121): "This apparently proved to be impossible, for in another Cherdyn case of 1629 the military governor was ordered to search for fugitives who had fled within the past ten years."

1634

[8]

Hellie (1971, 60): “In 1634 people were discharged from service so they could try to catch their fugitive slaves and peasants.”

1642

[8]

Hellie (1971, 54): “A decree of 1642 again stated that slaves could no longer own lands. (At the same time a law expelled slaves from the service class.)”

1642

[8]

Hellie (1971, 119): “In 1642, however, the peasant was forbidden to contract debts, for it would have been impossible to satisfy defaults by moving the peasant from his plot and converting him into a slave to work them off.”

1642

[8]

Hellie (1971, 132): “Grudgingly, perhaps under pressure from delegates to the 1642 Assembly of the Land convoked to discuss the cossack seizure of Azov, the government, still run by these same boyars and officials, raised the limit another year—to ten—for the recovery of fugitive peasants, and to fifteen for the recovery of peasants who had been taken away by force (*vyvoz*). The kidnapper had to pay the peasant's lawful lord five rubles per year for each year of the peasant's absence.”

1645

[8]

Hellie (1971, 133): “By 1645 the desired concession of no time limit for the recovery of fugitive peasants had not been granted.”

1647

[8]

Hellie (1971, 60): “In October, 1647, when the government was hunting fugitive peasants in the Novgorod area, it did not penalize *dvoriane* and *deti boiarskie* who had harbored them, in contrast to the fact that monasteries and high church officials who had done the same thing were required to compensate the peasants' lords for their losses.”

1647

[8]

Hellie (1971, 134): “Some time between September, 1647, and March, 1648, the government decreed that peasants who had fled to Lithuania over five years ago would be given their freedom if they returned to Russia.”

1648

[8]

Anderson (1974a, 203-204): “In 1648, the Zemsky Sobor-Assembly of the Land-gathered in Moscow, to pass the historic *Sobornoe Ulozhenie* which for the first time codified and universalized serfdom for the rural population; instituted strict state control over the towns and their inhabitants; while at the same time confirming and clinching the formal liability of all noble lands for military service...The social pact between the Russian Monarchy and aristocracy was sealed, establishing absolutism in exchange for finalizing serfdom.”

1648

[8]

Anderson (1974a, 337): “In 1648, tax and price increases proved violent artisan riots in Moscow...Alarmed by these renewed dangers, the current boyar government accepted a rapid convocation of the decisive Zemsky Sobor which finally lifted all limits on the forcible reclamation of fugitive peasants – thereby conceding the fundamental programme of the provincial gentry, and rallying them to the central State.”

1648

[8]

Hellie (1971, 61): “This situation is analogous to the events of 1648, which led to the repeal of the time limit on the recovery of fugitives and to the consummation of the enservment of the peasantry.”

1648

[8]

Hellie (1971, 134): “Some time between September, 1647, and March, 1648, the government decreed that peasants who had fled to Lithuania over five years ago would be given their freedom if they returned to Russia.”

1649

[8]

Anderson (1974, 337): “The *Sobornoe Ulozhenie of 1649* definitively codified and promulgated the serfdom of the peasantry, which was henceforward bound irreversibly to the soil.”

1649

[8]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by



government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

1649

[8]

Hellie (1971, 1): “Adherents of the legal, or decree, interpretation hold that the peasants, as a mass, were not effectively enserfed (either in law or in fact) until the promulgation of the Ulozhenie (law code) of 1649, and that the binding of the peasantry was achieved only after a series of conscious actions taken by the state power over the course of about two centuries.”

1649

[8]

Hellie (1971, 119): “Nevertheless, manumission was formally codified in the law code of 1649.” “The peasants protested that such transactions were necessary if they were to be able to pay taxes, so the government conceded to them the right to sell or mortgage their prop further in 1648 and 1649 when the Boyar Duma forbade the sale of erty, but only to local fellow-taxpayers. This prohibition was carried black lands in the western Pomor'e region even to local residents; in 1652 the prohibition neighboring areas.”

1649

[8]

Hellie (1971, 137): “The peasant question was nearly the last item of business acted on by the Assembly of the Land, for the decree binding the peasants to the land by repealing the time limit on the recovery of fugitives was not promulgated until January 2, 1649.”

1652

[8]

Hellie (1971, 119): “The peasants protested that such transactions were necessary if they were to be able to pay taxes, so the government conceded to them the right to sell or mortgage their prop further in 1648 and 1649 when the Boyar Duma forbade the sale of erty, but only to local fellow-taxpayers. This prohibition was carried black lands in the western Pomor'e region even to local residents; in 1652 the prohibition neighboring areas.”

1652

[8]

Hellie (1971, 119-120)

1653

Hellie (1971, 250): "In 1653 the government decreed that those who had fled to the Ukraine prior to the Ulozhenie were not to be returned. Lords of those peasants who had fled in the four subsequent years were to be paid cash for their lost laborers. This proclamation was confirmed in 1656 with the notice that no peasant who had been in the Ukraine in 1653 or earlier was to be returned to his former lord."

1658

[8]

Hellie (1971, 246): "In 1658 peasant flight had been made a criminal offense and the apprehended runaway was supposed to be beaten with the knout.<sup>24</sup> In the years 1658-63, a period which saw the phasing out of the middle service class, the government ceaselessly had conducted investigations throughout the territory of Muscovy to discover and re turn the tens of thousands of serfs who had fled south and east from their lords after the Ulozhenie to escape the plague and crop failures, recruiting, mounting taxes, and general oppression. "

1684

[7]

Hellie (1971, 251): "Permitted all peasant who had fled to Moscow to remain there and then this law was extended to other Muscovite towns"

1785

[8]

Anderson (1974a, 344): "The Charter of the Nobility granted by the Empress in 1785 completed the long journey of the peasantry into servitude. By it, Catherine II guaranteed the aristocracy all its privileges, released it from compulsory duties, and ensured it total jurisdictional control of its rural labour force: devolution of a measure of provincial administration smoothly transferred local functions to the gentry."

1861

[6]

Anderson (1974a, 348): "Alexander's emancipation of the peasantry in 1861 was itself executed in a fashion no less lucrative to the *dvoriansvo* than Hardenberg's had been to the junkers."

1580 or 1581

[5]

Hellie (1971, 96): "Beginning in late 1580 or in 1581 the government (perhaps annually) "temporarily" repealed the century-old right of peasants to move on St. George's Day 41 (Simultaneously the growth of monastery land-ownership was limited, and four years later a temporary measure was enacted curtailing monastery tax privileges.)"

1590s (1597)

[5]

Hellie (1971, 105): "The source of this five-year limit, known to historians for many years in a law of 1597, has been a mystery widely debated for over a century. Only recently V. I. Koretskii discovered evidence from suits involving peasants that the five-year limit was very probably part of the general decree of 1592-93 which bound all peasants to the land. It is safe to conclude on the basis of Koretskii's evidence that both of these measures were introduced at the beginning of the 1590s."

"The decree of 1597 extended this time limit to peasants who fled (*vykhod*)."

1592 or 1593

[5]

Hellie (1971, 48): "Besides repealing completely in 1592 or 1593 the right of all peasants to move on St. George's Day, he freed from taxation, about 1591, the land personally cultivated by pomeschchiki. This, coupled with the binding of the peasants to the land, stimulated a considerable increase in the amount of peasant corvée on middle service class lands."

1592 or 1593

[5]

Hellie (1971, 98): "A careful study of Koretskii's materials leads to the conclusion that there probably "temporary" decree (the most crucial decree in Russian history) in 1592 or 1593 binding all Russian peasants with their families to the land, regardless of whether they were registered in land cadastres. This repealed the right to move on St. George's Day. Peasants and *bobyli* no longer enjoyed the right of free movement (*vykhod*)"

1630s

[5]

Hellie (1971, 119): "Similarly, landowners, by the 1630s, came to enjoy the right to allow their peasants to move."

1647 or 1648

[5]

Hellie (1971, 134): " "Some time between September, 1647, and March, 1648, the government decreed that peasants who had fled to Lithuania over five years ago would be given their freedom if they returned to Russia."

1648 & 1649

[8]

Hellie (1971, 119): “The peasants protested that such transactions were necessary if they were to be able to pay taxes, so the government conceded to them the right to sell or mortgage their property further in 1648 and 1649 when the Boyar Duma forbade the sale of property, but only to local fellow-taxpayers.”

1497

[6]

Fukuyama (2011, 377): “In the words of the historian Jenő Szűcs, ‘The regions beyond the Elbe paid, in the long run, for the West’s recovery... The legislative omens of the ‘second serfdom’ appeared with awesome synchrony in Brandenburg (1494), Poland (1496), Bohemia (1497), Hungary (1492 and 1498), and also in Russia (1497).’”

1497

[2]

Hellie (1971, 235): “For reasons difficult to determine, this curtailment was applied to all peasants by the law code (*Sudebnik*) of 1497. After 1497 most peasants could move at only one time of year, upon payment of a small fee to the landlord.”

1592

[7]

Hellie (1971, 237): “Not all groups wanted mobility curtailed, for peasants had a tendency to move to the large estates belonging to the great boyars and the monasteries. Boris also needed their support in his drive for the throne, so he agreed (also in 1592) to place a five-year time limit on the recovery of peasants who moved in violation of the interdiction.”

## **Saxony**

1100/1200

[4]

Anderson (1974, 155): “Serfdom was not introduced into Saxony until the 12th or 13th centuries; it was never properly established in Sweden at all.”

1466

[1]

Abel (1980, 53): “In Tirol (1352), Saxony (1466 and 1482) and the estates of the Teutonic Order of Knights (from 1406) the landlords established regulations to that end.”

1482

[1]

Abel (1980, 53): "In Tirol (1352), Saxony (1466 and 1482) and the estates of the Teutonic Order of Knights (from 1406) the landlords established regulations to that end."

### **Schleswig**

1253

[4]

Anderson (1974b, 179): "Schleswig became the first proper fief to be granted by the Danish monarchy in 1253."

### **Serbia**

c.1331-1355

[3]

Inalcik (1973, 13): "For example, Dusan's code required the peasant to work for his lord two days a week."

### **Siena**

1348

[2]

Cohn (2007, 473): "As early as June 1348, Orvieto, and by the following year Siena, saw their first concerns as the repopulation of the city and its villages and turned almost immediately from the stick to the carrot, offering tax exemptions to encourage foreign labourers into their territories no matter what occupation they practised."

### **Silesia**

1300

[0]

Anderson (1974b, 243): "Thus the condition of the native peasantry in Poland, Bohemia, Silesia, Pomerania and elsewhere, which had been dipping downwards towards serfdom before the onset of the German colonization, now registered a recovery by assimilation to that of the newcomers; while the Prussian peasantry initially enserfed by the Teutonic Order were emancipated in the course of the succeeding century."

1559

[5]

Blum (1957, 830): "In Silesia laws of 1559 and 1562 established high norms, and in Hungary a decree of 1514 ordered one day of labor per week for each full-sized holding;"

1562

[6]

Blum (1957, 830): “In Silesia laws of 1559 and 1562 established high norms, and in Hungary a decree of 1514 ordered one day of labor per week for each full-sized holding;”

### **South-Western Germany**

1460

[0]

Anderson (1974b, 207): “The process of commutation took the form of a direct transition from labour services to money rents in England. On the continent, there was generally a somewhat slower evolution from labour services to rents in kind, and then to money rents. This was true both of France, where the final effect of the Hundred Years’ War was to leave the peasant in possession of his plots, and of South-Western Germany.”

### **Stargard**

1409

[3]

Carsten (1954, 99): “In 1409 the town of Stargard was granted the entire jurisdiction and the *advocatia*.”

### **Stettin (Pomerania)**

1482

[3]

Carsten (1954, 99): “The town of Stettin did not buy the *advocatia* and the jurisdiction in life and limb until 1482.”

### **Stolp (Ucker Mark - Pomerania)**

1447

[1]

Carsten (1954, 109): “In 1447 margrave Frederick decided a dispute between the von Buch and the burghers of their town of Stolp, in the Ucker Mark, in favour of the former: henceforth each inhabitant of the town was to serve them three days in the year.”

### **Stralsund (Pomerania)**

1452

[3]

Carsten (1954, 100): In 1452 Duke Wartislav was forced to concede to the Estates that, according to an ‘old and laudable custom,’ whoever held the *Bede* and the minting dues between Stralsund and Greifswad was *eo ipso* entitled to exercise the highest jurisdiction.”

1488

[3]

Carsten (1954, 99): “The town of Stettin did not buy the *advocatia* and the jurisdiction in life and limb until 1482., ene Stralsund not until 1488”

## **Swabia**

1100

[4]

Anderson (1974b 164): “During fifty years of constant strife, a great social change now occurred in Germany: in the conditions of ruthless depredations, anarchy and social violence, the German aristocracy destroyed the allodial basis of the non-noble free population that had always predominated in Saxony and Thuringia and been a pervasive presence in Bavaria and Swabia. The peasantry was reduced to serfdom, as public and folk justice lapsed, feudal dues were exacted, and military obligations were intensified and codified between the members of the noble class itself, to whose ranks the ministeriales were now added, amidst the turmoil of the times and the high turnover of traditional families.”

## **Sweden**

1279

[1]

Anderson (1974b, 179): “In 1279-80 the Swedish aristocracy achieved juridical tax-exemption (*frälse*) in exchange for formal obligation of knight-service (*rusttjänst*) to the monarch. It thereby became a separate legal class along continental lines, invested in fiefs (*länar*) by royal rulers. The consolidation of the local aristocracies into a feudal nobility was followed by a steady degradation of the condition of the peasantry in all the Scandinavian countries, during the centuries of late mediaeval depression.”

1483

[2]

Anderson (1974b, 181): “Swedish nobles declared themselves 'kings Over their own peasants' in the late 15th century (Recess of Kalmar 1483), and asserted in the 17th century that the peasantry as a class were *mediate subditi*; but again in practice, the actual relationship of class forces on the ground never allowed these claims to be made good.”

“There was no ascendant feudal monarchy in later mediaeval Sweden, but rather a reversion in the 14th and 15th centuries to conciliar rule by a rZd of magnates, for whom the Union of Kalmar, nominally presided over by a Danish dynasty in Copenhagen, provided a conveniently distant screen.”

1600

[3]

Anderson (1974b, 181): “Swedish nobles declared themselves 'kings Over their own peasants' in the late 15th century (Recess of Kalmar 1483), and asserted in the 17th century that the peasantry as a class were mediate subditi; but again in practice, the actual relationship of class forces on the ground never allowed these claims to be made good.”

1655

[1]

Downing (1993, 203): “The aristocracy, which in 1655 had controlled seventy-two percent of the farmland, possessed less than thirty-three percent by the end of the century.”

1680s

[0]

Anderson (1974b, 181): “Swedish nobles declared themselves 'kings Over their own peasants' in the late 15th century (Recess of Kalmar 1483), and asserted in the 17th century that the peasantry as a class were mediate subditi; but again in practice, the actual relationship of class forces on the ground never allowed these claims to be made good.”

### **Thuringia**

1100

[4]

Anderson (1974b, 164): “During fifty years of constant strife, a great social change now occurred in Germany: in the conditions of ruthless depredations, anarchy and social violence, the German aristocracy destroyed the allodial basis of the non-noble free population that had always predominated in Saxony and Thuringia and been a pervasive presence in Bavaria and Swabia. The peasantry was reduced to serfdom, as public and folk justice lapsed, feudal dues were exacted, and military obligations were intensified and codified between the members of the noble class itself, to whose ranks the ministeriales were now added, amidst the turmoil of the times and the high turnover of traditional families.”

### **Tirol (Brescia)**

1352

[1]

Abel (1980, 53): “In Tirol (1352), Saxony (1466 and 1482) and the estates of the Teutonic Order of Knights (from 1406) the landlords established regulations to that end.”

### **Torgelow castle (Pomerania)**

1454

[3]



Carsten (1954, 100): “In 1454 the duke of Pomerania sold his castle of Torgelow with the *advocatia* belonging to it.”

## **Transylvania**

1562

[4]

Kalman (2002, 25): “In the 1560s, when János Zsigmond, Prince of Transylvania, forced the Székelys to pay taxes, disregarding their privileges, those who refused to accept serfdom started fleeing to Moldavia in masses. Their number particularly increased after 1562, when the revolt of the Székelys was quelled.”

1590s

[5]

Kalman (2002, 25): “In the 1590s, upon the order of the Prince, the mountain passes leading to Moldavia were guarded.”

1607

[5]

Kalman (2002, 26):” In 1607 a law was passed to prevent the serfs from fleeing to Moldavia, noting that "in the past, due to the misery and decay of our poor country, many poor people fled, especially to Moldavia."”

1612

[6]

Kalman (2002, 26): “In 1612 a severe resolution was adopted about “guarding the roads and paths that lead to Moldavia”, and it was ordered that “anybody wishing to leave Transylvania together with his belongings and wife due to poverty should not be allowed to do so, but should be arrested and returned to his landlord”.”

1698

[6]

Kalman (2002, 26): “In 1698, the village of the runaway serf is obligated “to pursue him for two days walking distance, to catch and reduce him”; otherwise “the village is obligated to pay the taxes owed by the runaway and perform also the labour due to the landlord”.”

1590s

[5]

Kalman (2002, 25): “In the 1590s, upon the order of the Prince, the mountain passes leading to Moldavia were guarded. In his letter to the town of Beszterce/Bistrița on behalf of Prince Báthory Zsigmond Bocskai István wrote: “it is ordered herewith that the roads and paths be

guarded, because we do not want our people to leave the country for Moldavia; in fact, there are rumours that some of them intend to do that.””

## **Tuscany**

12th-13th centuries

[0]

Epstein (2009, 59-60): “Elsewhere, as in fertile Tuscany, over the course of the twelfth century, many landlords commuted old money rents and services into rents-in-kind, usually in grain, over long terms...Oaths of loyalty still bound these peasants to the landowners, who in the thirteenth century began to experiment with the *mezzadira* (sharecropping)...The peasants worked and paid over to the lord a fixed share.”

## **Ucker Mark (Pomerania)**

1383

[2]

Carsten (1954, 80-81): “[The peasants’] dues and services could not be altered, their legal position remained the same, and they benefited from the general economic development...There was a surplus of land, and if they disliked the conditions in their village they could move elsewhere. In that case their only obligation towards their landlords was to pay him the rent due and to plough and sow the fields of their farm. Then the peasant could sell it and leave with his goods and chattels. If he could not find a buyer, he could leave nevertheless, even if the landlord refused to take over; then the peasant could announce this to the village mayor and the other peasants and depart freely. This was the legal opinion of the noble *advocatus* of the Ucker Mark...in 1383.”

1403

[3]

Carsten (1954, 78): “In 1403 peasants of the Ucker Mark monastery of Himmelpfort had to serve the abbot 4 days in the year.”

1550

[5]

Carsten (1954, 157): “In 1550 the regulation of 1518 was repeated, but with the significant addition that the different customs of the Ucker Mark were to be observed: there the peasant apparently was no longer allowed to leave when he found a successor.”

## **Ukraine**

1656

[8]

Hellie (1971, 250): "In 1653 the government decreed that those who had fled to the Ukraine prior to the Ulozhenie were not to be returned. Lords of those peasants who had fled in the four subsequent years were to be paid cash for their lost laborers. This proclamation was confirmed in 1656 with the notice that no peasant who had been in the Ukraine in 1653 or earlier was to be returned to his former lord."

1675

[7]

Hellie (1971, 250): "In 1675 no former peasant or slave was to be returned who had enlisted in the new formation regiments."

### **Upper Austria**

1539

[4]

Bush (1996, 205): "Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus."

### **Wallachia and Moldavia**

1593-1601

[4]

McGowan (1994, 683): "The Phanariote ruler Constantine Mavricordato offered a solution in a series of similar decrees issued in Wallachia and Moldavia between 1746 and 1749. He abolished the now-unenforceable serfdom which had been on the books since the age of Michael the Brave, and he set uniform limits on the taxes and labor dues which could be required of the peasants...Besides the tithe, landlords annually could demand no more than twelve days of labor, far less than contemporary Habsburg or Russian landholders."

1746-1749

[2]

McGowan (1994, 683): "The Phanariote ruler Constantine Mavricordato offered a solution in a series of similar decrees issued in Wallachia and Moldavia between 1746 and 1749. He

abolished the now-unenforceable serfdom which had been on the books since the age of Michael the Brave, and he set uniform limits on the taxes and labor dues which could be required of the peasants...Besides the tithe, landlords annually could demand no more than twelve days of labor, far less than contemporary Habsburg or Russian landholders.”

### **West Pomerania**

1645

[4]

Bush (1996, 205): “Rather than spreading gradually through the ranks of the peasantry, in the typically western way, as a result of the policies of estate or territorial management that lords adopted, in the modern East it was established, either in the one form or the other, by government decrees which simply defined the inhabitants of private estates as the subjects of the landlord, with no right to leave and with limited access to public authority. Such orders were passed from the late fifteenth century, in Bohemia in 1487 and Poland in 1496; during the sixteenth century, in Hungary in 1514 (but repealed in 1547 and re-enacted in 1608), in Prussia in 1526 and Brandenburg in 1528, in Upper Austria in 1539 and Livonia in 1561; and on into the seventeenth century, with serfdom decreed in East Pomerania in 1616 and West Pomerania in 1645, in Russia initially in 1497 and finally in 1649, in Mecklenburg in 1654; and even into the late eighteenth century in the Ukraine, Crimea and the Caucasus.”

### **Zanow (Pomerania)**

1483

[3]

Carsten (1954, 100): “In 1483 the castle and town of Zanow, in both cases with the jurisdiction in life and limb which hitherto had been a ducal right.”

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