

## Bilaga 3. Skattningar av deltagande i undersökningen 2019/2020

Bilaga 3 till rapport:

Frisk och god arbetsmiljö under det senaste decenniet

– i det svenska näringslivet

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Skattning 1. Arbetsproduktiviteten (LP) och dess förmåga att förklara tendensen till att besvara enkäten (StatusNumb) rensat för branscher (capintgood osv), sysselsättning (ftg\_antalsysellsatt) och kapital (ftg\_anlaggningstillg)

Logistic Regression Results The LOGISTIC Procedure

Model Information

Data Set WORK.SORTTEMPTABLESORTED

Response Variable StatusNumb

Number of Response Levels 2

Weight Variable VIKT VIKT

Model binary logit

Optimization Technique Fisher's scoring

Number of Observations Read 9705

Number of Observations Used 6785

Sum of Weights Read 306391.1

Sum of Weights Used 191520.4

Response Profile

Ordered

Value	StatusNumb	Total Frequency	Total
1	0	3855	113251.53
2	1	2930	78268.91

Weight

1 0 3855 113251.53

2 1 2930 78268.91

Probability modeled is StatusNumb=0.

Note:2920 observations were deleted due to missing values for the response or explanatory variables.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	259079.85	257127.61
SC	259086.67	257223.12
-2 Log L	259077.85	257099.61

259079.85 257127.61

259086.67 257223.12

259077.85 257099.61

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	1978.2448	13	<.0001
Score	1974.9812	13	<.0001
Wald	1938.1900	13	<.0001

1978.2448 13 <.0001

1974.9812 13 <.0001

1938.1900 13 <.0001

Note:The following parameters have been set to 0, since the variables are a linear combination of other variables as shown. finance = 0

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq	
Intercept	1	0.3207	0.0362	78.5743	<.0001	
capintgood	1	-0.1055	0.0465	5.1437	0.0233	
capintmanu	1	0.1240	0.0537	5.3360	0.0209	
knowintmanu	1	-0.3324	0.0490	45.9436	<.0001	
labintmanu	1	-0.1001	0.0398	6.3158	0.0120	
constru	1	0.2974	0.0376	62.4834	<.0001	
trade	1	0.1293	0.0374	11.9421	0.0005	
capintserv	1	0.2691	0.0392	47.1004	<.0001	
knowintserv	1	-0.1630	0.0383	18.0996	<.0001	
finance	0	0	.	.	.	
labintserv	1	0.2939	0.0376	60.9811	<.0001	
eduhealth	1	-0.1530	0.0404	14.3314	0.0002	
LP	1	-0.00009	7.324E-6	159.3137	<.0001	
Ftg_Anlaggningsstillg	1		1.502E-8	5.429E-9	7.6566	0.0057
Ftg_Antal_anstallda	1		0.000030	0.000025	1.3622	0.2432

Skattning 2. Variabeln andel akademiker (AkaAnd18) och dess förmåga att förklara tendensen till att besvara enkäten (StatusNumb) rensat för branscher (capintgood osv.)

Logistic Regression Results The LOGISTIC Procedure

Model Information

Data Set WORK.SORTTEMPTABLESORTED  
 Response Variable StutusNumb  
 Number of Response Levels 2  
 Weight Variable VIKT VIKT  
 Model binary logit  
 Optimization Technique Fisher's scoring

Number of Observations Read 9705  
 Number of Observations Used 9705  
 Sum of Weights Read 306391.1  
 Sum of Weights Used 306391.1

Response Profile

Ordered

Value	StatusNumb	Total	Weight
1	0	5745	197285.15
2	1	3960	109105.92

Probability modeled is StatusNumb=0.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	399009.78	390100.00
SC	399016.96	390193.34
-2 Log L	399007.78	390074.00

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	8933.7793	12	<.0001
Score	8851.7669	12	<.0001
Wald	8663.5266	12	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	0.1567	0.0185	71.6985	<.0001
capintgood	1	-0.00825	0.0342	0.0583	0.8093
capintmanu	1	0.1975	0.0434	20.7569	<.0001
knowintmanu	1	-0.2047	0.0367	31.0752	<.0001
labintmanu	1	0.00733	0.0247	0.0880	0.7667
constru	1	0.4108	0.0212	376.5858	<.0001
trade	1	0.2499	0.0204	150.0995	<.0001
capintserv	1	0.3769	0.0234	260.3011	<.0001
knowintserv	1	-0.0555	0.0214	6.7401	0.0094
finance	1	-0.0977	0.0479	4.1622	0.0413
labintserv	1	0.3718	0.0206	326.5731	<.0001
eduhealth	1	0.9229	0.0183	2537.9995	<.0001
AkaAnd18	1	-0.0588	0.0232	6.4309	0.0112

Skattning 3. Variabeln andel företag som har utvecklat något nytt för marknaden (market-devD18) dess förmåga att förklara tendensen till att besvara enkäten (StatusNumb) rensat för branscher (capintgood osv.)

Logistic Regression Results The LOGISTIC Procedure

Model Information

Data Set WORK.SORTTEMPTABLESORTED  
 Response Variable StutusNumb  
 Number of Response Levels 2  
 Weight Variable VIKT VIKT  
 Model binary logit  
 Optimization Technique Fisher's scoring

Number of Observations Read 2978  
 Number of Observations Used 2978  
 Sum of Weights Read 75070.97  
 Sum of Weights Used 75070.97

Response Profile

Ordered

Value	StutusNumb	Total Frequency	Total Weight
1	0	1466	37963.408
2	1	1512	37107.561

Probability modeled is StutusNumb=0.

Model Convergence Status

Quasi-complete separation of data points detected.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	104062.70	103639.17
SC	104068.70	103717.15
-2 Log L	104060.70	103613.17

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	447.5379	12	<.0001
Score	425.6360	12	<.0001
Wald	370.5807	12	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq	Intercept
	11.2031		37.1117	0.0911	0.7627	1
capintgood	1	-11.5601	37.1118	0.0970	0.7554	
capintmanu	1	-10.9045	37.1118	0.0863	0.7689	
knowintmanu	1	-11.6350	37.1118	0.0983	0.7539	
labintmanu	1	-11.3076	37.1118	0.0928	0.7606	
constru	1	-11.1275	37.1118	0.0899	0.7643	
trade	1	-11.1329	37.1118	0.0900	0.7642	
capintserv	1	-11.3323	37.1118	0.0932	0.7601	
knowintserv	1	-11.2161	37.1118	0.0913	0.7625	
finance	1	-11.3107	37.1118	0.0929	0.7605	
labintserv	1	-11.0214	37.1118	0.0882	0.7665	
eduhealth	1	-10.7192	37.1123	0.0834	0.7727	
marketdevD18	1	0.00486	0.0189	0.0664	0.7967	

Skattning 4. Variabeln företags IT-nivåns (IT\_Level19) förmåga att förklara tendensen till att besvara enkäten (StatusNumb) rensat för branscher (capintgood osv.)

Logistic Regression Results  
The LOGISTIC Procedure

Model Information

Data Set WORK.SORTTEMPTABLESORTED  
 Response Variable StutusNumb  
 Number of Response Levels 2  
 Weight Variable VIKT VIKT  
 Model binary logit  
 Optimization Technique Fisher's scoring

Number of Observations Read 4113  
 Number of Observations Used 2230  
 Sum of Weights Read 60154.18  
 Sum of Weights Used 54797.22

Response Profile

Ordered

Value	StatusNumb	Total	Weight
1	0	1085	27590.627
2	1	1145	27206.591

Probability modeled is StatusNumb=0.

Note:1883 observations were deleted due to missing values for the response or explanatory variables.

Model Convergence Status

Convergence criterion (GCONV=1E-8) satisfied.

Model Fit Statistics

Criterion	Intercept Only	Intercept and Covariates
AIC	75964.384	75702.507
SC	75970.093	75771.024
-2 Log L	75962.384	75678.507

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	277.6558	11	<.0001
Score	277.6558	11	<.0001
Wald	264.7563	11	<.0001

Note:The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.

finance = 0

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	0.7026	0.1016	47.8093	<.0001
capintgood	1	-1.3207	0.1282	106.1091	<.0001
capintmanu	1	-0.6780	0.1170	33.5714	<.0001
knowintmanu	1	-0.9959	0.1089	83.6016	<.0001
labintmanu	1	-0.8205	0.1038	62.5476	<.0001
constru	1	-0.7219	0.1044	47.8458	<.0001
trade	1	-0.7007	0.1026	46.5938	<.0001
capintserv	1	-0.7859	0.1047	56.3313	<.0001
knowintserv	1	-0.6245	0.1030	36.7502	<.0001
finance	0	0	.	.	.
labintserv	1	-0.5920	0.1027	33.2080	<.0001
eduhealth	1	1.5012	0.5405	7.7140	0.0055
IT19_level	1	0.0405	0.0289	1.9574	0.1618