NOTES

_dta:
  1. Copyright 2016-18 The European Bank for Reconstruction and Development and The World Bank.
  2. Version as of 23 Aug 2017.Compared to the version of 5 Oct 2015, data for Cyprus and Greece were added, variable a3 was corrected for several cases in Russia and a3b for one case in Armenia.
  3. All variables are in Local Currency Units (LCU) where applicable.
  4. Refer to data in all uses as EBRD-World Bank Business Environment and Enterprise Performance Survey (BEEPS) V.
  5. Please read the Technical documentation before using the data.
  6. Address comments and questions using the form at http://ebrd-beeps.com/contact/ (EBRD) or email WB at rru@worldbank.org (subject Enterprise Surveys Question).

a10:
  1. a10. Establishment's fin. statements prepared separately from other establishments

c28:
  1. c28. Does this establishment currently use cell phones for the operations of this establishment?

d7:
  1. d7. % of value of products exported directly lost in transit - breakage/spoilage

d11:
  1. d11. % of value of products for domestic markets lost in transit - breakage/spoilage

d12a:
  1. d12a. Domestic material inputs or supplies as a % of all material inputs or supplies

d12b:
  1. d12b. Foreign material inputs or supplies as a % of all material inputs or supplies

ecad31b1:
  1. ECAd31b1. Change in total costs if customs and trade regulations are no longer an obstacle

ecad31b2:
  1. ECAd31b2. Expected % increase in total costs - customs and trade regulations no obstacle

ecad31b3:
  1. ECAd31b3. Expected % decrease in total costs - customs and trade regulations no obstacle

e6:
  1. e6. Does the company use technology licensed from a foreign-owned company (excluding office software)?

ecaq53:
  1. ECAq53. Over the past 3 years, has the firm received any subsidies from local, regional or national government, or EU sources?

h4:
  1. h4. New organisational/management practices or structures introduced over last 3 yrs

g4:
  1. g4. Informal gift/ payment expected/requested to obtain construction-related permit?

k1c:
  1. k1c. Paid after delivery - % of total annual purchases of material inputs/services

k9:
  1. k9. Type of financial institution that granted the most recent line of credit/loan

k14e:
  1. k14e. Collateral - Other forms of collateral not included in the categories above

k15a:
  1. k15a. Approx. collateral value required for the most recent line of credit/loan (LCU)

k15b:
  1. k15b. Total number of outstanding loans/lines of credit held by this establishment

k15c:
  1. k15c. Total value of outstanding loans/lines of credit held by this establishment (LCU)

k15d:
  1. k15d. Outstanding personal loans used to finance establishment's business activities?

ecak17:
  1. ECAk17. Main reason for not applying for line of credit/loan

ecaj31c1:
  1. ECAj31c1. Change in total costs if business licensing and permits no longer an obstacle

ecaj31c2:
  1. ECAj31c2. Expected % increase in total costs - business licensing and permits no obstacle

ecaj31c3:
  1. ECAj31c3. Expected % decrease in total costs - business licensing and permits no obstacle

ecaq41c:
  1. ECAq41c. Frequency of unofficial payments/gifts to deal with taxes and tax collection

ecaq44a:
  1. ECAq44a. Private payments/gifts/other benefits to Parliamentarians - direct impact

ecaq44b:
  1. ECAq44b. Private payments/gifts/other benefits to Government officials - direct impact

ecaq44c:
  1. ECAq44c. Private payments/gifts/other benefits to local/regional officials -direct impact

ecar20x:
  1. ECAr20x. Main reason the establishment did not hire an external consultant (Other)

l1:
  1. l1. Number of permanent, full-time individuals working at the end of last fiscal yr

l4a:
  1. l4a. Number of permanent, full-time individuals who are skilled production workers

l4b:
  1. l4b. Number of permanent, full-time individuals who are unskilled production workers

l5:
  1. l5. Number of permanent, full-time individuals working at the end of last fiscal yr who are

female

l5b:
  1. l5b. Female permanent full-time non-production workers at the end of last fiscal yr

l6a:
  1. l6a. Number of temporary full-time workers employed at the end of last fiscal yr who are
      female

l8:
  1. l8. Average length of employment of full-time temporary employees in last fiscal yr (months)

l10:
  1. l10. Formal training programs for permanent full-time employees over last fiscal yr?

l11a:
  1. l11a. % of production full-time permanent employees that received formal training

l11b:
  1. l11b. % of non-production full-time permanent employees that received formal training

ecal31b1:
  1. ECAl31b1. Change in total sales if inadequately educated workforce no longer an obstacle

ecal31b2:
  1. ECAl31b2. Expected % increase in total sales - inadequately educated workforce no obstacle

ecal31b3:
  1. ECAl31b3. Expected % decrease in total sales - inadequately educated workforce no obstacle

ecao1a:
  1. ECAo1a. No. of new/significantly improved products/services introduced over last 3 yrs

ecao2c:
  1. ECAo2c. Main new /significantly improved product/service new to international market

ecao3g:
  1. ECAo3g. New product/service is more efficient/easier to use than existing product/service

4

ecao4:
  1. ECAo4. % annual sales accounted for by new or significantly improved products/services

ecao5x:
  1. ECAo5x. Way in which main new/significantly improved product/service introduced (Other)

ecao8x:
  1. ECAo8x. Most important new/significantly improved method of supplying products/services

ecao10b:
  1. ECAo10b. New method of supplying products/services: change in machinery and equipment

ecao11:
  1. ECAo11. Way of intro of main new/significantly improved production/delivery method

ecao11x:
  1. ECAo11x. Way of intro of main new/significantly improved production/delivery method (Oth)

ecao12:
  1. ECAo12. Purchase/license inventions required to apply new production/delivery method?

ecao14b:
  1. ECAo14b. Introduction of management systems for general production or supply operations

ecao19:
  1. ECAo19. Expenditures on R&D contracted with other companies in last fiscal yr (LCU)

ecao22a:
  1. ECAo22a. % of workforce that regularly used PCs in their jobs at end last fiscal yr

ecao23cx:
  1. ECAo23cx. Country or countries where the establishment applied for a patent or trademark

ecar15:
  1. ECAr15. Reassignment/dismissal of under-performing non-manager over last fiscal yr

VARIABLE LABELS

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  obs:         16,566
 vars:            395                             23 Aug 2017 09:59
 size:     21,166,223                             (_dta has notes)
-------------------------------------------------------------------------------
              storage   display    value
variable name   type    format     label      variable label
-------------------------------------------------------------------------------
id              double  %20.0f                 Respondent unique ID
qnrno           double  %20.0f     valllabel
                                               QNRNO. QUESTIONNAIRE NUMBER
idstd           long    %14.0g     valllabel
                                               WEB STD FIRMID
id2009          long    %12.0g                 ID number in 2008-2009 round
a0              byte    %8.0g      A0          Questionnaire module
a1              int     %22.0g     country      Country code
country         str18   %18s                   Country
a1a             byte    %8.0g      A1A          Interview language
a2              int     %9.0g                  Sampling region
a2x             strL    %9s                    a2x. Sampling region
a3a             int     %9.0g                  Screener region
a3ax            strL    %9s                    a3ax. Screener region
a3b             byte    %8.0g      A3B          Official capital city?
a3c             byte    %8.0g      A3C         Main business city?
a3              byte    %56.0g     A3          Size of locality
a4a             byte    %8.0g      A4A         Industry sampling sector
a4b             byte    %8.0g      A4B          Industry screener sector
a5              byte    %8.0g      A5          Sector match between screener information and sample
                                                  frame
a6a             byte    %17.0g     sizelabels
                                               Sampling size
a6b             byte    %8.0g      A6B         Screener size
a7              byte    %8.0g      A7          Establishment part of a larger firm?
a7a             int     %14.0g     valllabel
                                                Number of establishments that form the firm
a8              byte    %8.0g      A8           Type of establishment
a9              byte    %8.0g      A9          Establishment's financial statements prepared
                                                  separately from HQ statements
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6

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a10          byte    %8.0g    A10      *  Establishment's fin. statements prepared separately
                                           from other establishmen
a11          byte    %8.0g    A11         a11. If HQ, financial statements independent from
                                           the rest of the establishments
a11a         int     %14.0g   valllabel
                                          Number of establishments included in the financial
                                           statements kept in HQ
a12          long    %14.0g   valllabel
                                           Inteviewer number
a13          long    %14.0g   valllabel
                                          aSupervisor number
a14d         byte    %10.0g                Time face-to-face main interview starts: Day
a14m         byte    %10.0g                Time face-to-face main interview starts: Month
a14y         int     %10.0g                 Time face-to-face main interview starts: Year
a14h         byte    %10.0g                 Time face-to-face main interview starts: Hour
a14min       byte    %10.0g                 Time face-to-face main interview starts: Minutes
b1           byte    %8.0g    B1            Firm's current legal status
b1x          strL    %9s                    Firm's current legal status (Other)
b3           byte    %8.0g    B3            % of this firm owned by the largest owner(s)
b2a          byte    %8.0g    B2A           % owned by private domestic individuals
b2b          byte    %8.0g    B2B           % owned by private foreign individuals
b2c          byte    %8.0g    B2C            % owned by Government/State
b2d          byte    %8.0g    B2D            % owned by Other
b4           byte    %8.0g    B4            Amongst the owners of the firm
b4a          byte    %8.0g    B4A           What percentage of the firm is owned by females?
ecaq5        byte    %8.0g    ECAQ5          How was the firm established?
ecaq5x       strL    %9s                     How was the firm established (Other)
b5           int     %14.0g   valllabel
                                            In what yr did this establishment begin operations?
b6           int     %14.0g   valllabel
                                          Full-time employees employed by the establishment at
                                           the start of operations
b6a          byte    %8.0g    B6A           Establishment formally registered when it began
                                           operations?
b6b          int     %14.0g   valllabel
                                          Year of formal registration of the establishment
b7           byte    %8.0g    B7            Top Manager's number of yrs of experience working
                                           in this sector
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b7a          byte    %8.0g     B7A            Female Top Manager?
b8           byte    %8.0g     B8             Have an internationally-recognized quality
                                                 certification?
c3           byte    %8.0g     C3             Submit application to obtain an electrical
                                                 connection over last 2 yrs?
c4           int     %14.0g    valllabel
                                              Number of days it took to obtain electrical
                                                 connection
c5           byte    %8.0g     C5             Informal gift/ payment expected/requested to obtain
                                                 electrical connection?
c6           byte    %8.0g     C6             Power outages over last fiscal yr?
c7           int     %8.0g     C7           c7. "Number of power outages over last fiscal yr
c8           int     %8.0g     C8             Average duration of power outages
c9a          byte    %8.0g     C9A            % of total annual sales lost due to power outages
c9b          long    %14.0g    valllabel
                                              Annual losses due to power outages (LCU)
c10          byte    %8.0g     C10            Own or share a generator over last fiscal yr?
c11          byte    %8.0g     C11            % of establishment's electricity from generator(s)
                                                 owned/shared
c12          byte    %8.0g     C12            Submit application to obtain a water connection over
                                                 last 2 yrs?
c13          int     %14.0g    valllabel
                                              Number of days it took to obtain water connection
c14          byte    %8.0g     C14            Informal gift/ payment expected/requested to obtain
                                                 water connection?
c15          byte    %8.0g     C15            Insufficient water supply for production over last
                                                 fiscal yr?
c16          int     %8.0g     C16          Insufficient water supply over last fiscal yr
c17          int     %8.0g     C17            Average duration of incidents of insufficient water
                                                 supply
c22a         byte    %8.0g     C22A           Use e-mail to communicate with clients or
                                                 suppliers?
c22b         byte    %8.0g     C22B           Have its own website?
c23          byte    %8.0g     C23            High-speed Internet connection on establishment's
                                                 premises?
c28          byte    %8.0g     C28       *    Does this establishment currently use cell phones
                                                 for the operations of thi
c30a         byte    %8.0g     C30A           Electricity - obstacle to current operations
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ecac31a1	byte	%8.0g	ECAC31A1		Change in total costs if electricity no longer an obstacle
ecac31a2	int	%8.0g	ECAC31A2		Expected % increase in total costs - electricity no obstacle
ecac31a3	float	%9.0g	ECAC31A3		Expected % decrease in total costs - electricity no obstacle
c30b	byte	%8.0g	C30B		Telecommunications - obstacle to current operations
d1a1x	strL	%9s			Establishment's main product/service last fiscal yr
d1a2	int	%14.0g	valllabel		The 4-digit ISIC code that best applies to the main product/service
d1a3	byte	%8.0g	D1A3		Share of main product/service in total sales
d2	double	%14.0g	valllabel		Total annual sales last fiscal yr (LCU)
d2x	strL	%9s			Total annual sales last fiscal yr (string)
n3	double	%14.0g	valllabel		Total annual sales 3 yrs ago (LCU)
d3a	byte	%8.0g	D3A		National sales as a % of total annual sales
d3b	byte	%8.0g	D3B		Indirect exports as a % of total annual sales
d3c	byte	%8.0g	D3C		Direct exports as a % of total annual sales
d4	int	%14.0g	valllabel		Average number of days to clear customs in last fiscal yr (direct export)
d6	byte	%8.0g	D6		% of value of products exported directly lost in transit - theft
d7	byte	%8.0g	D7	*	% of value of products exported directly lost in transit - breakage/spoilage
d8	int	%14.0g	valllabel		Year of exporting directly or indirectly for the first time
d10	byte	%8.0g	D10		% of value of products for domestic markets lost in transit - theft
d11	byte	%8.0g	D11	*	% of value of products for domestic markets lost in transit - breakage/spoi
ecaq15a	byte	%8.0g	ECAQ15A		% of national sales to government/government agencies
d12a	byte	%8.0g	D12A	*	Domestic material inputs or supplies as a % of all material inputs or supp

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d12b          byte    %8.0g      D12B     * Foreign material inputs or supplies as a % of all
                                              material inputs or suppl
d13           byte    %8.0g      D13        Direct import of material inputs or supplies
                                              purchased in last fiscal yr?
d14           int     %8.0g      D14        Average number of days to clear customs in last
                                              fiscal yr (direct import)
d16           int     %8.0g      D16        Average days of inventory of most important input
d17           int     %8.0g      D17        At the present time
d30a          byte    %8.0g      D30A       Transport - obstacle to current operations
d30b          byte    %8.0g      D30B       Customs and trade regulations - obstacle to current
                                              operations
ecad31b1      byte    %8.0g      ECAD31B1 * Change in total costs if customs and trade
                                              regulations are no longer a
ecad31b2      int     %8.0g      ECAD31B2 * Expected % increase in total costs - customs and
                                              trade regulations no
ecad31b3      byte    %8.0g      ECAD31B3 * Expected % decrease in total costs - customs and
                                              trade regulations no
e1            byte    %8.0g      E1         Main market for the main product/service in last
                                              fiscal yr
e2b           byte    %17.0g     e2b        Competitors for the main product/service in the
                                              main market
e6            byte    %8.0g      E6       * Technology licensed from a foreign-owned company
e11           byte    %8.0g      E11        Competition against unregistered or informal firms?
ecaq53        byte    %8.0g      ECAQ53   * National
e30           byte    %8.0g      E30        Practices of informal competitors - obstacle to
                                              current operations
h1            byte    %8.0g      H1         New products/services introduced over last 3 yrs
h2            byte    %8.0g      H2         New products/services new to one of the
                                              establishment's markets?
h3            byte    %8.0g      H3         New production/supply methods introduced over last
                                              3 yrs
h4            byte    %8.0g      H4       * New organisational/management practices or
                                              structures introduced over last 3
h5            byte    %8.0g      H5         New marketing methods introduced over last 3 yrs
h6            byte    %8.0g      H6         h6. Spending on R&D over last 3 yrs
ecah4         byte    %8.0g      ECAH4      ecah4. New logistical or business support processes
                                              introduced over last 3 yrs
ecah8         byte    %8.0g      ECAH8      ecah8. Give employees time to develop or try out a
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                                          new approach/idea about produ
f1              byte    %8.0g     F1        Capacity utilisation in last fiscal yr
f2              int     %8.0g     F2        Typical hours of operation in a week
g1a             byte    %8.0g     G1A       Land - % owned by this establishment
g1b             byte    %8.0g     G1B       Land - % rented or leased by this establishment
g1c             byte    %8.0g     G1C       Land - % Other
g2              byte    %8.0g     G2        Submit application to obtain a construction-related
                                            permit over last 2 yrs?
g3              int     %14.0g    valllabel
                                          Number of days it took to obtain a
                                          construction-related permit
g4              byte    %8.0g     G4      * Informal gift/ payment expected/requested to obtain
                                            construction-related per
g5a             long    %14.0g    valllabel
                                          What is the total selling area of this
                                          establishment? - Area
g5b             byte    %8.0g     G5B       What is the total selling area of this
                                            establishment? - Units
g5bx            str10   %10s                Other
g6a             byte    %8.0g     G6A       Buildings occupied - % owned by this establishment
g6b             byte    %8.0g     G6B       Buildings occupied - % rented or leased by this
                                            establishment
g6c             byte    %8.0g     G6C       Buildings occupied - % Other
g30a            byte    %8.0g     G30A      Access to land - obstacle to current operations
i1              byte    %8.0g     I1        Pay for security in last fiscal yr?
i2a             byte    %8.0g     I2A       % of total annual sales for security
i2b             long    %14.0g    valllabel
                                          Total annual cost of security (LCU)
i3              byte    %8.0g     I3        Losses as a result of theft
i4a             byte    %8.0g     I4A       Losses due to theft
i4b             long    %14.0g    valllabel
                                          Total annual value of losses due to theft
i30             byte    %8.0g     I30       Crime
ecai31a1        byte    %8.0g     ECAI31A1  Change in total costs if crime
ecai31a2        byte    %8.0g     ECAI31A2  Expected % increase in total costs - crime
ecai31a3        byte    %8.0g     ECAI31A3  Expected % decrease in total costs - crime
k1c             byte    %8.0g     K1C     * Paid after delivery - % of total annual purchases
                                            of material inputs/serv
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k2c             byte    %8.0g     K2C         Paid after delivery - % of total annual sales of
                                              goods and services
k3a             byte    %8.0g     K3A         Working capital - % Internal funds/Retained
                                              earnings
k3bc            byte    %8.0g     K3BC        Working capital - % Borrowed from banks (private
                                              and state-owned)
k3e             byte    %8.0g     K3E         Working capital - % Borrowed from non-bank
                                              financial institutions
k3f             byte    %8.0g     K3F         Working capital - % Purchases on credit from
                                              suppliers
k3hd            byte    %8.0g     K3HD        Working capital - % Other
k4              byte    %8.0g     K4          Purchase of fixed assets in last fiscal yr?
n5a             double  %14.0g    valllabel

                                              n5a. Spending on purchases of machinery, vehicles
                                              and equipment in last fiscal y
n5b             double  %14.0g    valllabel

                                              n5b. Spending on purchases of land and buildings in
                                              last fiscal yr (LCU)
k5a             byte    %8.0g     K5A         Fixed assets - % Internal funds or retained earnings
k5i             byte    %8.0g     K5I          Fixed assets - % Owners' contribution or issued new
                                              equity shares
k5bc            byte    %8.0g     K5BC         Fixed assets - % Borrowed from banks: private and
                                              state-owned
k5e             byte    %8.0g     K5E          Fixed assets - % Borrowed from non-bank financial
                                              institutions
k5f             byte    %8.0g     K5F         Fixed assets - % Purchases on credit from suppliers
k5hdj           byte    %8.0g     K5HDJ        Fixed assets - % Other
ecak4a          byte    %8.0g     ECAK4A       Leasing of fixed assets in last fiscal yr?
k6              byte    %8.0g     K6          k6. Have a checking or savings account at time of
                                              the interview?
k7              byte    %8.0g     K7          k7. Have an overdraft facility at time of the
                                              interview?
k8              byte    %8.0g     K8          k8. Have a line of credit or a loan from a financial
                                              institution at time of the
k9              byte    %8.0g     K9      *   Type of financial institution that granted the most
                                              recent line of credit/lo
ecak9a          byte    %8.0g     ECAK9A       Bank that provided the most recent line of
                                              credit/loan
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k10              int     %14.0g    valllabel
                                             Year of approval of the most recent line of
                                                credit/loan
k11              double  %14.0g    valllabel
                                              Value of the most recent line of credit/loan at the
                                                time of approval (LCU)
ecaq46f          byte    %8.0g     ECAQ46F   Currency of the most recent line of credit/loan
ecaq46fx         strL    %9s                 Currency of the most recent line of credit/loan
                                                (Other)
ecaq46d          double  %12.0g    ECAQ46D   Annual nominal interest rate of the most recent
                                                line of credit/loan
ecaq46e          int     %8.0g     ECAQ46E   Original duration of the most recent line of
                                                credit/loan in months
k13              byte    %8.0g     K13       Collateral required for the most recent line of
                                                credit/loan?
k14a             byte    %8.0g     K14A      Collateral - Land
k14b             byte    %8.0g     K14B      Collateral - Machinery and equipment including
                                                movables
k14c             byte    %8.0g     K14C      Collateral - Accounts receivable and inventories
k14d             byte    %8.0g     K14D      Collateral - Personal assets of owner (house
k14e             byte    %8.0g     K14E    * Collateral - Other forms of collateral not included
                                                in the categories abov
k15a             double  %14.0g    valllabel
                                           * Approx. collateral value required for the most
                                                recent line of credit/loan
ecak15a1         double  %14.0g    valllabel
                                             Outstanding balance on the most recent line of
                                                credit/loan (LCU)
k15b             int     %8.0g     K15B    * Total number of outstanding loans/lines of credit
                                                held by this establishme
k15c             double  %14.0g    valllabel
                                           * Total value of outstanding loans/lines of credit
                                                held by this establishmen
k15d             byte    %8.0g     K15D    * Outstanding personal loans used to finance
                                                establishment's business activi
k16              byte    %8.0g     K16       Apply for any loans/lines of credit in last fiscal
                                                yr?
ecak17           byte    %8.0g     ECAK17  * Main reason for not applying for line of
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                                              credit/loan
k20a         byte   %8.0g     K20A      Outcome of the most recent application for line of
                                              credit/loan
k21          byte   %8.0g     K21       Annual financial statements checked and certified
                                              by an external auditor?
k30          byte   %8.0g     K30       Access to finance - obstacle to current operations
ecaq31e      byte   %8.0g     ECAQ31E   Plaintiff or defendant in court in the last 3 yrs?
h7a          byte   %8.0g     H7A       H7a. The court system is fair, impartial and
                                              uncorrupted
ecaj1b       byte   %8.0g     ECAJ1B    The court system is quick
ecaj1c       byte   %8.0g     ECAJ1C    The court system is able to enforce its decisions
j2           byte   %8.0g     J2        % Senior management's time spent on dealing with
                                              regulations
j3           byte   %8.0g     J3        Visited or inspected by tax officials over last yr?
j4           int    %8.0g     J4        Number of inspections by/required meetings with tax
                                              officials over last yr
j5           byte   %8.0g     J5        Informal gift/payment expected/requested in
                                              meetings/tax inspections?
j6a          byte   %8.0g     J6A       Secured or attempted to secure a government
                                              contract over last yr?
j6           byte   %8.0g     J6        % of contract value typically paid to secure a
                                              government contract
j7a          byte   %8.0g     J7A       % of total annual sales paid as informal
                                              payment/gift
j7b          double %14.0g    valllabel
                                         Total annual informal payment (LCU)
j10          byte   %8.0g     J10       Submit application to obtain an import license over
                                              last 2 yrs?
j11          int    %8.0g     J11       Number of days it took to obtain import license
j12          byte   %8.0g     J12       Informal gift/ payment expected/requested to obtain
                                              import license?
j13          byte   %8.0g     J13       Submit application to obtain an operating license
                                              over last 2 yrs?
j14          int    %8.0g     J14       Number of days it took to obtain operating license
j15          byte   %8.0g     J15       Informal gift/ payment expected/requested to obtain
                                              operating license?
j30a         byte   %8.0g     J30A      Tax rates - obstacle to current operations
j30b         byte   %8.0g     J30B      Tax administration - obstacle to current operations
```

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ecaj31b1      byte    %8.0g    ECAJ31B1     Change in total costs if tax administration no
                                                longer an obstacle
ecaj31b2      int     %8.0g    ECAJ31B2     Expected % increase in total costs - tax
                                                administration no obstacle
ecaj31b3      byte    %8.0g    ECAJ31B3     Expected % decrease in total costs - tax
                                                administration no obstacle
j30c          byte    %8.0g    J30C         Business licensing and permits - obstacle to
                                                current operations
ecaj31c1      byte    %8.0g    ECAJ31C1 *   Change in total costs if business licensing and
                                                permits no longer an obstacle
ecaj31c2      int     %8.0g    ECAJ31C2 *   Expected % increase in total costs - business
                                                licensing and permits no
ecaj31c3      int     %8.0g    ECAJ31C3 *   Expected % decrease in total costs - business
                                                licensing and permits no
j30e          byte    %8.0g    J30E         Political instability - obstacle to current
                                                operations
j30f          byte    %8.0g    J30F         Corruption - obstacle to current operations
ecaj31f1      byte    %8.0g    ECAJ31F1     Change in total costs if corruption no longer an
                                                obstacle
ecaj31f2      int     %8.0g    ECAJ31F2     Expected % increase in total costs - corruption no
                                                obstacle
ecaj31f3      byte    %8.0g    ECAJ31F3     Expected % decrease in total costs - corruption no
                                                obstacle
h30           byte    %8.0g    H30          Courts - obstacle to current operations
ecah31a1      byte    %8.0g    ECAH31A1     Change in total costs if courts no longer an
                                                obstacle
ecah31a2      int     %8.0g    ECAH31A2     Expected % increase in total costs - courts no
                                                obstacle
ecah31a3      byte    %8.0g    ECAH31A3     Expected % decrease in total costs - courts no
                                                obstacle
ecaq39        byte    %8.0g    ECAQ39       Frequency of informal payments/gifts to get things
                                                done
ecaq41a       byte    %8.0g    ECAQ41A      Frequency of unofficial payments/gifts to deal with
                                                customs/imports
ecaq41b       byte    %8.0g    ECAQ41B      Frequency of unofficial payments/gifts to deal with
                                                courts
ecaq41c       byte    %8.0g    ECAQ41C  *   Frequency of unofficial payments/gifts to deal with
                                                taxes and tax colle
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ecaq44a         byte    %8.0g       ECAQ44A  *  Private payments/gifts/other benefits to
                                                 Parliamentarians - direct impa
ecaq44b         byte    %8.0g       ECAQ44B  *  Private payments/gifts/other benefits to Government
                                                 officials - direct
ecaq44c         byte    %8.0g       ECAQ44C  * Private payments/gifts/other benefits to
                                                 local/regional officials -dire
ecar16a         int     %8.0g       ECAR16A    Number of times an external consultant hired in
                                                 last 3 fiscal yrs
ecar17a         byte    %8.0g       ECAR17A    ecar17a. Used consulting for business skills
                                                 improvements
ecar17b         byte    %8.0g       ECAR17B    ecar17b. Used consulting for business process
                                                 improvements
ecar17c         byte    %8.0g       ECAR17C    ecar17c. Used consulting for more sophisticated
                                                 projects
ecar18          byte    %8.0g       ECAR18     Any external consultants hired from local
                                                 consulting firms?
ecar20          byte    %8.0g       ECAR20     Main reason the establishment did not hire an
                                                 external consultant
ecar20x         strL    %9s                  *  Main reason the establishment did not hire an
                                                 external consultant (Other
l1              int     %14.0g      valllabel
                                            * l1. Number of permanent, full-time individuals
                                                 working at the end of last fiscal
l2              int     %14.0g      valllabel
                                              l2. Number of permanent, full-time individuals
                                                 working 3 fiscal yrs ago
l3a             int     %14.0g      valllabel
                                              l3a. Number of permanent, full-time individuals who
                                                 are production workers
l3b             int     %14.0g      valllabel
                                              l3b. Number of permanent, full-time individuals who
                                                 are non-production workers
l4a             int     %14.0g      valllabel
                                            * l4a. Number of permanent, full-time individuals who
                                                 are skilled production worke
l4b             int     %14.0g      valllabel
                                            * l4b. Number of permanent, full-time individuals who
                                                 are unskilled production wor
```

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l5              int     %14.0g      valllabel
                                            * Number of permanent, full-time individuals working
                                                at the end of last fiscal yea
l5a             int     %14.0g      valllabel
                                              l5a. Female permanent full-time production workers
                                                at the end of last fiscal yea
l5b             int     %14.0g      valllabel
                                            * l5b. Female permanent full-time non-production
                                                workers at the end of last fiscal
l6              int     %14.0g      valllabel
                                              l6. Number of temporary full-time workers employed
                                                at the end of last fiscal yea
l6a             int     %14.0g      valllabel
                                            * l6a. Number of female temporary full-time workers
                                                employed at the end of last fi
l8              byte    %8.0g       L8        * l8. Average length of employment of full-time
                                                temporary employees in last fiscal
l9a1            byte    %8.0g       L9A1        l9a1. Average number of yrs of education of typical
                                                permanent production worker
l9a2            byte    %8.0g       L9A2        l9a2. Average number of yrs of education of typical
                                                female permanent production
ecaq69          byte    %8.0g       ECAQ69      % of full time employees who completed a university
                                                degree
l10             byte    %8.0g       L10       *   Formal training programs for permanent
l11a            byte    %8.0g       L11A      * % of production full-time permanent employees that
                                                received formal trainin
l11b            byte    %8.0g       L11B      *   % of non-production full-time permanent employees
                                                that received formal tra
l30a            byte    %8.0g       L30A        Labor regulations - obstacle to current operations
ecal31a1        byte    %8.0g       ECAL31A1    Change in total costs if labor regulations no longer
                                                an obstacle
ecal31a2        byte    %8.0g       ECAL31A2    Expected % increase in total costs - labor
                                                regulations no obstacle
ecal31a3        byte    %8.0g       ECAL31A3    Expected % decrease in total costs - labor
                                                regulations no obstacle
l30b            byte    %8.0g       L30B        Inadequately educated workforce - obstacle to
                                                current operations
ecal31b1        byte    %8.0g       ECAL31B1  *   Change in total sales if inadequately educated
```

```
                                         workforce no longer an obstacle
ecal31b2        int     %8.0g     ECAL31B2 *  Expected % increase in total sales - inadequately
                                         educated workforce no
ecal31b3        byte    %8.0g     ECAL31B3 * Expected % decrease in total sales - inadequately
                                         educated workforce no
m1a             byte    %8.0g     M1A       Business environment - biggest obstacle faced
m1d             byte    %8.0g     M1D       Card rotation number (pre-defined)
n2a             double  %14.0g    valllabel
                                         Total cost of labor (LCU)
n2e             double  %14.0g    valllabel
                                         Total cost of raw materials and intermediate goods
                                          used in production (LCU)
n2f             double  %14.0g    valllabel
                                         Total costs of fuel (LCU)
n2b             double  %14.0g    valllabel
                                         Total costs of electricity (LCU)
n2i             double  %14.0g    valllabel
                                         Total annual cost of finished goods and materials
                                          purchased to resell
n2ra            double  %14.0g    valllabel
                                         Total rental cost of machinery
n2rb            double  %14.0g    valllabel
                                         Total rental cost of land and buildings
n2j             double  %14.0g    valllabel
                                         Other cost of production not included above
n6a             double  %14.0g    valllabel
                                         Net book value of machinery
n6b             double  %14.0g    valllabel
                                         Net book value of land and buildings (LCU)
n7a             double  %14.0g    valllabel
                                         Replacement cost for machinery
n7b             double  %14.0g    valllabel
                                         Replacement cost for land and buildings (LCU)
ecas1a          byte    %8.0g     ECAS1A    Expectations about annual sales in next fiscal yr
ecas1b          int     %8.0g     ECAS1B    % of expected increase in annual sales in the next
                                          fiscal yr
ecas1c          byte    %8.0g     ECAS1C    % of expected decrease in annual sales in the next
                                          fiscal yr
```

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vin1a         byte     %8.0g      VIN1A        Perception of corruption - Town no. 1
vin1b         byte     %8.0g      VIN1B        Perception of corruption - Town no. 2
vin1c         byte     %8.0g      VIN1C        Perception of corruption - Town no. 3
vin1d         byte     %8.0g      VIN1D        Perception of corruption - Town no. 4
vin1e         byte     %8.0g      VIN1E        Perception of corruption - Town no. 5
a15a1ax       strL     %9s                     a15a1ax. Main respondent's position in the firm
a15a2a        byte     %8.0g      A15A2A       Main respondent's yrs with the firm
ecaa15a4a     byte     %8.0g      ECAA15A4     Main respondent's yrs in the position
a15a3a        byte     %8.0g      A15A3A       Main respondent's gender
a15a1bx       str44    %44s                    a15a1bx. Second respondent's position in the firm
a15a2b        byte     %8.0g      A15A2B       Second respondent's yrs with the firm
ecaa15a4b     byte     %8.0g      V294_A       Second respondent's yrs in the position
a15a3b        byte     %8.0g      A15A3B       Second respondent's gender
a15a1cx       str47    %47s                    a15a1cx. Third respondent's position in the firm
a15a2c        byte     %8.0g      A15A2C       Third respondent's yrs with the firm
ecaa15a4c     byte     %8.0g      V298_A       Third respondent's yrs in the position
a15a3c        byte     %8.0g      A15A3C       Third respondent's gender
a15d          byte     %10.0g                  Time face-to-face main interview ends: Day
a15m          byte     %10.0g                  Time face-to-face main interview ends: Month
a15y          int      %10.0g                  Time face-to-face main interview ends: Year
a15h          byte     %10.0g                  Time face-to-face main interview ends: Hour
a15min        byte     %10.0g                  Time face-to-face main interview ends: Minutes
a16           byte     %8.0g      A16          Truthfullness of responses to questions regarding
                                                 opinions and perceptions
a17           byte     %8.0g      A17          Accuracy of responses to questions regarding
                                                 figures
a18           byte     %8.0g      A18          Questionnaire completion information
a19h          byte     %8.0g      A19H         Estimate duration of the whole interview: Hours
a19m          byte     %8.0g      A19M         Estimated duration of the whole interview: Minutes
a23           byte     %8.0g      A23          Mode of questionnaire implementation
a23x          strL     %9s                     Mode of questionnaire implementation (Other)
a14id         byte     %10.0g                  Time face-to-face innovation module interview
                                                 starts: Day
a14im         byte     %10.0g                  Time face-to-face innovation module interview
                                                 starts: Month
a14iy         int      %10.0g                  Time face-to-face innovation module interview
                                                 starts: Year
a14ih         byte     %10.0g                  Time face-to-face innovation module interview
```

					starts: Hour
a14imin	byte	%10.0g			Time face-to-face innovation module interview starts: Minutes
ecao1a	byte	%8.0g	ECAO1A	*	No. of new/significantly improved products/services introduced over last
ecao1bx	strL	%9s			Main new/significantly improved product/service
ecao2a	byte	%8.0g	ECAO2A		Main new /significantly improved product/service new to local market
ecao2b	byte	%8.0g	ECAO2B		Main new /significantly improved product/service new to national market
ecao2c	byte	%8.0g	ECAO2C	*	Main new /significantly improved product/service new to international ma
ecao3a	byte	%8.0g	ECAO3A		New product/service: Added new functions to existing product/service
ecao3b	byte	%8.0g	ECAO3B		New product: Uses new materials/components that enhance its performance
ecao3c	byte	%8.0g	ECAO3C		New product: Uses new technology
ecao3d	byte	%8.0g	ECAO3D		New product: Looks different from the existing product
ecao3e	byte	%8.0g	ECAO3E		New product/service: Completely new to the establishment
ecao3g	byte	%8.0g	ECAO3G	*	New product/service is more efficient/easier to use than existing produc
ecao3f	byte	%8.0g	ECAO3F		New product/service: Other
ecao3fx	strL	%9s			New product/service: Other specified
ecao4	byte	%8.0g	ECAO4	*	% annual sales accounted for by new or significantly improved products/se
ecao5	byte	%8.0g	ECAO5		Way in which main new/significantly improved product/service introduced
ecao5x	strL	%9s		*	Way in which main new/significantly improved product/service introduced
ecao6	byte	%8.0g	ECAO6		Purchase/license inventions
ecao7a	byte	%8.0g	ECAO7A		Introduced new methods of supplying products/services over last 3 yrs
ecao7b	byte	%8.0g	ECAO7B		Introduced new logistics
ecao7c	byte	%8.0g	ECAO7C		Introduced new ancillary support services over last 3 yrs
ecao8x	strL	%9s		*	Most important new/significantly improved method of

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                                          supplying products/s
ecao9a          byte    %8.0g    ECAO9A      New method of supplying products/services new to
                                                local market
ecao9b          byte    %8.0g    ECAO9B      New method of supplying products/services new to
                                                national market
ecao9c          byte    %8.0g    ECAO9C      New method of supplying products/services new to
                                                international market
ecao10a         byte    %8.0g    ECAO10A     New method of supplying products/services: change
                                                in techniques
ecao10b         byte    %8.0g    ECAO10B  *  New method of supplying products/services: change
                                                in machinery and equi
ecao10c         byte    %8.0g    ECAO10C     New method of supplying products/services: change
                                                in software
ecao10d         byte    %8.0g    ECAO10D     New method of supplying products/services: changes
                                                in management
ecao11          byte    %8.0g    ECAO11   *  Way of intro of main new/significantly improved
                                                production/delivery meth
ecao11x         strL    %9s               *  Way of intro of main new/significantly improved
                                                production/delivery met
ecao12          byte    %8.0g    ECAO12   *  Purchase/license inventions
ecao13          byte    %8.0g    ECAO13      Technology compared to the technology of
                                                establishment's main competitor
ecao14a         byte    %14.0g   ECAO14A     New knowledge management systems
ecao14b         byte    %14.0g   ECAO14B  *  Introduction of management systems for general
                                                production or supply ope
ecao14c         byte    %14.0g   ECAO14C     New methods for distributing responsibilities
ecao14d         byte    %14.0g   ECAO14D     Significant change to the management structure of
                                                the establishment
ecao14e         byte    %14.0g   ECAO14E     New types of collaborations with businesses
ecao14f         byte    %14.0g   ECAO14F     Outsourcing
ecao15a         byte    %14.0g   ECAO15A     Significant changes in the product's appearance
ecao15b         byte    %14.0g   ECAO15B     Introduction of a new method of advertising or
                                                product promotion
ecao15c         byte    %14.0g   ECAO15C     Introduction of a new method of product placement
                                                or sales channels
ecao15d         byte    %14.0g   ECAO15D     New pricing strategies to market the
                                                establishment's goods or services
ecao16          byte    %8.0g    ECAO16      Spending on R&D within establishment over last 3
```

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                                                    yrs?
ecao17          double  %14.0g      valllabel
                                                    Expenditures on R&D within establishment in last
                                                      fiscal yr (LCU)
ecao18          byte    %8.0g       ECAO18          Spending on R&D contracted with other companies
                                                      over last 3 yrs?
ecao19          long    %14.0g      valllabel
                                          *         Expenditures on R&D contracted with other companies
                                                      in last fiscal yr (L
ecao20          byte    %8.0g       ECAO20          Spending on acquisition of external knowledge over
                                                      last 3 yrs?
ecao21          byte    %8.0g       ECAO21          Source of purchase or license of the latest
                                                      invention
ecao22a         byte    %8.0g       ECAO22A  *      % of workforce that regularly used PCs in their
                                                      jobs at end last fiscal
ecao22b         byte    %8.0g       ECAO22B         % of workforce that regularly used PCs in their
                                                      jobs 3 fiscal yrs ago
ecao23a         byte    %8.0g       ECAO23A         Ever been granted a patent?
ecao23b         byte    %8.0g       ECAO23B         Apply for a patent/trademark over last 3 yrs?
ecao23cx        strL    %9s                  *      ECAo23cx. Country or countries where the
                                                      establishment applied for a patent or t
ecao23d         byte    %8.0g       ECAO23D         Granted a patent/trademark over last 3yrs?
ecar1           byte    %8.0g       ECAR1           Dealing with problems in the production process
                                                      over last fiscal yr
ecar2           byte    %44.0g      ECAR2           Number of production performance indicators
                                                      monitored over last fiscal yr
ecar6           byte    %68.0g      ECAR6           Time frame of production targets over last fiscal yr
ecar7           byte    %50.0g      ECAR7           Achievement of production targets over last fiscal
                                                      yr
ecar8           byte    %41.0g      ECAR8           Awareness of production targets over last fiscal yr
ecar11          byte    %8.0g       ECAR11          Basis for managers' performance bonuses over last
                                                      fiscal yr
ecar13          byte    %8.0g       ECAR13          Primary way of promoting non-managers over last
                                                      fiscal yr
ecar15          byte    %8.0g       ECAR15   *      Reassignment/dismissal of under-performing
                                                      non-manager over last fiscal
a15id           byte    %10.0g                      Time face-to-face innovation module interview ends:
                                                      Day
```

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a15im           byte    %10.0g                  Time face-to-face innovation module interview ends:
                                                    Month
a15iy           int     %10.0g                  Time face-to-face innovation module interview ends:
                                                    Year
a15ih           byte    %10.0g                  Time face-to-face innovation module interview ends:
                                                    Hour
a15imin         byte    %10.0g                  Time face-to-face innovation module interview ends:
                                                    Minutes
a24             byte    %8.0g       A24          Innovation module respondent same as main
                                                    questionnaire respondent?
a15a1dx         str35   %35s                    Innovation module respondent's position in the firm
a15a2d          byte    %8.0g                   Innovation module respondent's yrs with the firm
ecaa15a4d       byte    %8.0g                   Innovation module respondent's yrs in the position
a15a3d          byte    %8.0g       A15A3D      Innovation module respondent's gender
strata          int     %14.0g      valllabel
                                                group(a2 a4anew a6a panel)
wstrict         double  %14.0g      valllabel
                                                Weight according to strict eligibility
wmedian         double  %14.0g      valllabel
                                                Weight according to median eligibility
wweak           double  %14.0g      valllabel
                                                Weight according to weak eligibility
innov_elig      byte    %39.0g      innov_elig
                                                Source of eligibility for the innovation module
a1ax            str11   %11s                    Language of the interview
fy              int     %9.0g                   Year used for last fiscal year
fy_n3           int     %9.0g                   Year used for 3 fiscal years ago for variable n3
lcu             str46   %46s                    Local currency used for monetary value questions
                                      * indicated variables have notes
```

VALUE LABELS
A3:
       1 Capital city
       2 City with population over 1 million - other than capital
       3 Population: over 250000 to 1 million
       4 Population: 50000-250000
       5 Population: less than 50000

23

```
AGENCY:
            1 Ipsos Tambor
            2 Median
            3 DataCollect
            4 acrc
            5 Ipsos Turkey
            6 Yontem
            7 CMRC Cypronetwork
            8 Lipa Consultancy
ECAT11A:
           -8 Refused
            1 Yes
            2 No
ECAR8:
           -9 Don't know
           -8 Refused
           -7 Does not apply
            1 Only senior managers
            2 Most managers and some production workers
            3 Most managers and most production workers
            4 All managers and most production workers
ECAR7:
           -9 Don't know
           -8 Refused
           -7 Does not apply
            1 Possible to achieve without much effort
            2 Possible to achieve with some effort
            3 Possible to achieve with normal amount of effort
            4 Possible to achieve with more than normal effort
            5 Only possible to achieve with extraordinary effort
ECAR6:
           -9 Don't know
           -8 Refused
           -7 Does not apply
            1 Main focus was on short-term (less than one year) production targets
            2 Main focus was on long-term (more than one year) production targets
            3 Combination of short term and long term production targets
            4 No production targets
```

ECAR2:
-9 Don't know
-8 Refused
-7 Does not apply
 1 1-2 production performance indicators
 2 3-9 production performance indicators
 3 10 or more production performance indicators
 4 No production performance indicators

ECAO15D:
-9 Don't know
-8 Refused
-7 Does not apply
 1 Yes
 2 No

ECAO15C:
-9 Don't know
-8 Refused
-7 Does not apply
 1 Yes
 2 No

ECAO15B:
-9 Don't know
-8 Refused
-7 Does not apply
 1 Yes
 2 No

ECAO15A:
-9 Don't know
-8 Refused
-7 Does not apply
 1 Yes
 2 No

ECAO14F:
-9 Don't know
-8 Refused
-7 Does not apply
 1 Yes
 2 No

```
ECAO14E:
        -9 Don't know
        -8 Refused
        -7 Does not apply
         1 Yes
         2 No
ECAO14D:
        -9 Don't know
        -8 Refused
        -7 Does not apply
         1 Yes
         2 No
ECAO14C:
        -9 Don't know
        -8 Refused
        -7 Does not apply
         1 Yes
         2 No
ECAO14B:
        -9 Don't know
        -8 Refused
        -7 Does not apply
         1 Yes
         2 No
ECAO14A:
        -9 Don't know
        -8 Refused
        -7 Does not apply
         1 Yes
         2 No
country:
        44 Albania
        50 Belarus
        51 Georgia
        52 Tajikistan
        53 Turkey
        54 Ukraine
        55 Uzbekistan
```

```
                    58 Russia
                    59 Poland
                    60 Romania
                    61 Serbia
                    62 Kazakhstan
                    63 Moldova
                    64 Bosnia and Herzegovina
                    65 Azerbaijan
                    66 FYR Macedonia
                    67 Armenia
                    68 Kyrgyz Republic
                    69 Mongolia
                    70 Estonia
                    71 Kosovo
                    72 Czech Republic
                    73 Hungary
                    74 Latvia
                    75 Lithuania
                    76 Slovak Republic
                    77 Slovenia
                    78 Bulgaria
                    79 Croatia
                    80 Montenegro
                   196 Cyprus
                   300 Greece
POSLON:
                     1 East
POSLAT:
                     1 North
V386_A:
                    -8 Refused
A15A2D:
                    -8 Refused
V296_A:
                    -8 Refused
                    -7 does not apply code
V292_A:
                    -8 Refused
```

```
                -7 does not apply code
L6A:
                -9 Don't know
                -8 Refused
L6:
                -9 Don't know
                -8 Refused
                 0 NO FULL-TIME SEASONAL OR TEMPORARY WORKERS
L5:
                -9 Don't know
                -8 Refused
L5B:
                -9 Don't know
                -8 Refused
L5A:
                -9 Don't know
                -8 Refused
L4B:
                -9 Don't know
                -8 Refused
L4A:
                -9 Don't know
                -8 Refused
L3B:
                -9 Don't know
                -8 Refused
L3A:
                -9 Don't know
                -8 Refused
L2:
                -9 Don't know
                -8 Refused
                -7 THE ESTABLISHMENT WAS NOT IN BUSINESS THREE YEARS AGO
L1:
                -9 Don't know
                -8 Refused
K10:
                -9 Don't know
```

```
            -8 Refused
G5A:
            -9 Don't know
            -8 Refused
G3:
            -9 Don't know
            -8 Refused
            -6 STILL IN PROCESS (SPONTANEOUS)
            -5 APPLICATION DENIED (SPONTANEOUS)
             1 LESS THAN ONE DAY
E2B:
            -8 Refused
            -4 TOO MANY TO COUNT
D8:
            -9 Don't know
            -8 Refused
D4:
            -9 Don't know
            -8 Refused
            -7 DOES NOT APPLY
C13:
            -9 Don't know
            -8 Refused
            -6 Still in process (spontaneous)
            -5 Application Denied (spontaneous)
             1 LESS THAN ONE DAY
C4:
            -9 Don't know
            -8 Refused
            -6 Still in process (spontaneous)
            -5 Application Denied (spontaneous)
             1 LESS THAN ONE DAY
B6B:
            -9 Don't know
            -8 Refused
B6:
            -9 Don't know
            -8 Refused
```

```
B5:
           -9 Don't know
           -8 Refused
A11A:
           -8 Refused
           -7 DOES NOT APPLY
A6A:
            0 Micro<5
            1 Small >=5 and <=19
            2 Medium >=20 and <=99
            3 Large >=100
dow:
            0 Sunday
            1 Monday
            2 Tuesday
            3 Wednesday
            4 Thursday
            5 Friday
            6 Saturday
COMPLETI:
            1 CAPI
            2 PAPI
innov_elig:
           -8 Refusal
            0 Not eligible
            1 Section H and sector & size
            2 Section H only
            3 Sector & size only
            4 Eligible, but not completed
            5 Not eligible, but some answers provided
sizelabels:
            0 Micro (1 to 5)
            1 Small (5 to 19)
            2 Medium (20 to 99)
            3 Large (100+)
A0:
            1 Manufacturing
            2 Retail
```

```
              3 Core
A1A:
              1 Local language
              2 Russian
A3B:
              1 Yes
              2 No
A3C:
              1 Yes
              2 No
A4A:
             15 Food
             16 Tobacco products
             17 Textiles
             18 Garments
             19 Tanning & leather
             20 Wood
             21 Paper & paper products
             22 Publishing_ printing and recorded media
             23 Coke & refined petroleum
             24 Chemicals
             25 Plastics & rubber
             26 Non metallic mineral products
             27 Basic metals
             28 Fabricated metal products
             29 Machinery and equipment
             30 Office machinery
             31 Electronics
             32 Communication equipment
             33 Precision instruments
             34 Motor vehicles
             35 Other transport equipment
             36 Furniture
             37 Recycling
             45 Construction
             50 Services of motor vehicles
             51 Wholesale
             52 Retail
```

```
        55 Hotel and restaurants
        60 Transport
        63 Supporting transport activities
        64 Post and telecommunications
        72 IT
A4B:
        15 Food
        16 Tobacco products
        17 Textiles
        18 Garments
        19 Tanning & leather
        20 Wood
        21 Paper & paper products
        22 Publishing_ printing and recorded media
        23 Coke & refined petroleum
        24 Chemicals
        25 Plastics & rubber
        26 Non metallic mineral products
        27 Basic metals
        28 Fabricated metal products
        29 Machinery and equipment
        30 Office machinery
        31 Electronics
        32 Communication equipment
        33 Precision instruments
        34 Motor vehicles
        35 Other transport equipment
        36 Furniture
        37 Recycling
        45 Construction
        50 Services of motor vehicles
        51 Wholesale
        52 Retail
        55 Hotel and restaurants
        60 Transport
        63 Supporting transport activities
        64 Post and telecommunications
        72 IT
```

A5:
        1 Yes_ screener and sample frame info match
        2 No_ screener and sample frame do not match but establishment still does activities wh
> ich match sample frame
        3 No_ does not match
A6B:
        0 Micro<5
        1 Small >=5 and <=19
        2 Medium >=20 and <=99
        3 Large >=100
A7:
        1 Yes
        2 No_ a firm on its own
A8:
       -7 DOES NOT APPLY
        1 HQ without production and/or sales in this location
        2 HQ with production and/or sales in this location
        3 Establishment physically separated from HQ and other establishments of the same firm
        4 Establishment physically separated from HQ but with other establishments of the same
> firm
A9:
       -7 DOES NOT APPLY
        1 Yes
        2 No
A10:
       -7 DOES NOT APPLY
        1 Yes
        2 No
A11:
       -7 DOES NOT APPLY
        1 Yes
        2 No
B1:
       -9 Don't know
       -8 Refused
        1 Shareholding company with shares traded in the stock market
        2 Shareholding company with non-traded shares or shares traded privately
        3 Sole proprietorship

```
                    4 Partnership
                    5 Limited partnership
                    6 Other_ SPONTANEOUS - please specify
B3:
                    -9 Don't know
                    -8 Refused
B2A:
                    -9 Don't know
                    -8 Refused
B2B:
                    -9 Don't know
                    -8 Refused
B2C:
                    -9 Don't know
                    -8 Refused
B2D:
                    -9 Don't know
                    -8 Refused
B4:
                    -9 Don't know
                    -8 Refused
                     1 Yes
                     2 No
B4A:
                    -9 Don't know
                    -8 Refused
ECAQ5:
                    -8 Refused
                     1 Privatization of a state-owned firm
                     2 Originally private_ from time of start up
                     3 Private subsidiary of a formerly state-owned firm
                     4 Joint venture with foreign partner(s)
                     5 State-owned firm
                     6 Other_ SPONTANEOUS - please specify
B6A:
                    -9 Don't know
                    -8 Refused
                     1 Yes
```

```
                    2 No
B7:
          9998 Less than one year
B7A:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
B8:
                   -9 Don't know
                   -8 Refused
                   -6 STILL IN PROCESS
                    1 Yes
                    2 No
C3:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
C5:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
C6:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
C7:
                   -9 Don't know
                   -8 Refused
C8:
                   -9 Don't know
                   -8 Refused
C9A:
                   -9 Don't know
                   -8 Refused
```

```
C10:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
C11:
          -9 Don't know
          -8 Refused
C12:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
C14:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
C15:
          -9 Don't know
          -8 Refused
          -7 The establishment does not use water for production
           1 Yes
           2 No
C16:
          -9 Don't know
          -8 Refused
C17:
          -9 Don't know
          -8 Refused
C22A:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
C22B:
          -9 Don't know
          -8 Refused
```

```
                    1 Yes
                    2 No
C23:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
C28:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
C30A:
                   -9 Don't know
                   -8 Refused
                   -7 DOES NOT APPLY
                    0 No obstacle
                    1 Minor obstacle
                    2 Moderate obstacle
                    3 Major obstacle
                    4 Very severe obstacle
ECAC31A1:
                   -9 Don't know
                   -8 Refused
                    1 Increase
                    2 Remain the same
                    3 Decrease
ECAC31A2:
                   -9 Don't know
                   -8 Refused
ECAC31A3:
                   -9 Don't know
                   -8 Refused
C30B:
                   -9 Don't know
                   -8 Refused
                   -7 DOES NOT APPLY
                    0 No obstacle
```

```
            1 Minor obstacle
            2 Moderate obstacle
            3 Major obstacle
            4 Very severe obstacle
D1A3:
            -9 Don't know
            -8 Refused
D3A:
            -9 Don't know
            -8 Refused
D3B:
            -9 Don't know
            -8 Refused
D3C:
            -9 Don't know
            -8 Refused
D6:
            -9 Don't know
            -8 Refused
            -7 DOES NOT APPLY
D7:
            -9 Don't know
            -8 Refused
            -7 DOES NOT APPLY
D10:
            -9 Don't know
            -8 Refused
            -7 NO INTERNAL SHIPMENTS MADE (DOES NOT APPLY)
D11:
            -9 Don't know
            -8 Refused
            -7 NO INTERNAL SHIPMENTS MADE (DOES NOT APPLY)
ECAQ15A:
            -9 Don't know
            -8 Refused
            -7 DOES NOT APPLY (FOR COMPANIES THAT DO NOT DO NOT HAVE DOMESTIC SALES)
D12A:
            -9 Don't know
```

```
                -8 Refused
D12B:
                -9 Don't know
                -8 Refused
D13:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
D14:
                -9 Don't know
                -8 Refused
D16:
                -9 Don't know
                -8 Refused
D17:
                -9 Don't know
                -8 Refused
D30A:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
                 2 Moderate obstacle
                 3 Major obstacle
                 4 Very severe obstacle
D30B:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
                 2 Moderate obstacle
                 3 Major obstacle
                 4 Very severe obstacle
ECAD31B1:
                -9 Don't know
```

```
                -8 Refused
                 1 Increase
                 2 Remain the same
                 3 Decrease
ECAD31B2:
                -9 Don't know
                -8 Refused
ECAD31B3:
                -9 Don't know
                -8 Refused
E1:
                -9 Don't know
                -8 Refused
                 1 Local - main product sold mostly in same municipality where establishment is located
                 2 National - main product sold mostly across the country where establishment is located
                 3 International - main product sold mostly to nations outside country where establishme
> nt is located
E6:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
E11:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAQ53:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
E30:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
```

```
            2 Moderate obstacle
            3 Major obstacle
            4 Very severe obstacle
H1:
            -9 Don't know
            -8 Refused
             1 Yes
             2 No
H2:
            -9 Don't know
            -8 Refused
             1 Yes
             2 No
H3:
            -9 Don't know
            -8 Refused
             1 Yes
             2 No
H4:
            -9 Don't know
            -8 Refused
             1 Yes
             2 No
H5:
            -9 Don't know
            -8 Refused
             1 Yes
             2 No
H6:
            -9 Don't know
            -8 Refused
             1 Yes
             2 No
ECAH4:
            -9 Don't know
            -8 Refused
             1 Yes
             2 No
```

```
ECAH8:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
F1:
          -9 Don't know
          -8 Refused
F2:
          -9 Don't know
          -8 Refused
G1A:
          -9 Don't know
          -8 Refused
          -7 DOES NOT APPLY
G1B:
          -9 Don't know
          -8 Refused
          -7 DOES NOT APPLY
G1C:
          -9 Don't know
          -8 Refused
          -7 DOES NOT APPLY
G2:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
G4:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
G5B:
          -8 Refused
           1 Square Feet
           2 Square Yards
           3 Square Meters
```

```
                  4 Other_ please specify
G6A:
                 -9 Don't know
                 -8 Refused
G6B:
                 -9 Don't know
                 -8 Refused
G6C:
                 -9 Don't know
                 -8 Refused
G30A:
                 -9 Don't know
                 -8 Refused
                 -7 DOES NOT APPLY
                  0 No obstacle
                  1 Minor obstacle
                  2 Moderate obstacle
                  3 Major obstacle
                  4 Very severe obstacle
I1:
                 -9 Don't know
                 -8 Refused
                  1 Yes
                  2 No
I2A:
                 -9 Don't know
                 -8 Refused
I3:
                 -9 Don't know
                 -8 Refused
                  1 Yes
                  2 No
I4A:
                 -9 Don't know
                 -8 Refused
I30:
                 -9 Don't know
                 -8 Refused
```

```
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
                 2 Moderate obstacle
                 3 Major obstacle
                 4 Very severe obstacle
ECAI31A1:
                -9 Don't know
                -8 Refused
                 1 Increase
                 2 Remain the same
                 3 Decrease
ECAI31A2:
                -9 Don't know
                -8 Refused
ECAI31A3:
                -9 Don't know
                -8 Refused
K1C:
                -9 Don't know
                -8 Refused
K2C:
                -9 Don't know
                -8 Refused
K3A:
                -9 Don't know
                -8 Refused
K3BC:
                -9 Don't know
                -8 Refused
K3E:
                -9 Don't know
                -8 Refused
K3F:
                -9 Don't know
                -8 Refused
K3HD:
                -9 Don't know
```

```
                         -8 Refused
K4:
                         -9 Don't know
                         -8 Refused
                          1 Yes
                          2 No
K5A:
                         -9 Don't know
                         -8 Refused
K5I:
                         -9 Don't know
                         -8 Refused
K5BC:
                         -9 Don't know
                         -8 Refused
K5E:
                         -9 Don't know
                         -8 Refused
K5F:
                         -9 Don't know
                         -8 Refused
K5HDJ:
                         -9 Don't know
                         -8 Refused
ECAK4A:
                         -9 Don't know
                         -8 Refused
                          1 Yes
                          2 No
K6:
                         -9 Don't know
                         -8 Refused
                          1 Yes
                          2 No
K7:
                         -9 Don't know
                         -8 Refused
                          1 Yes
```

```
              2 No
K8:
              -9 Don't know
              -8 Refused
               1 Yes
               2 No
K9:
              -9 Don't know
              -8 Refused
               1 Private commercial banks
               2 State-owned banks or government agency
               3 Non-bank financial institutions
               4 Other
ECAK9A:
              -9 Don't know
              -8 Refused
               1 Bank 1
               2 Bank 2
               3 Bank 3
               4 Bank 4
               5 Bank 5
               6 Bank 6
               7 Bank 7
               8 Bank 8
               9 Bank 9
              10 Bank 10
              11 Bank 11
              12 Other, SPONTANEOUS - please specify
ECAQ46F:
              -8 Refused
               1 Local currency
               2 Euro
               3 US Dollar
               4 Other_ SPONTANEOUS - please specify
ECAQ46D:
              -9 Don't know
              -8 Refused
ECAQ46E:
```

```
                    -9 Don't know
                    -8 Refused
K13:
                    -9 Don't know
                    -8 Refused
                     1 Yes
                     2 No
K14A:
                    -9 Don't know
                    -8 Refused
                     1 Yes
                     2 No
K14B:
                    -9 Don't know
                    -8 Refused
                     1 Yes
                     2 No
K14C:
                    -9 Don't know
                    -8 Refused
                     1 Yes
                     2 No
K14D:
                    -9 Don't know
                    -8 Refused
                     1 Yes
                     2 No
K14E:
                    -9 Don't know
                    -8 Refused
                     1 Yes
                     2 No
K15B:
                    -9 Don't know
                    -8 Refused
K15D:
                    -9 Don't know
                    -8 Refused
```

```
                1 Yes
                2 No
K16:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAK17:
                -9 Don't know
                -8 Refused
                 1 No need for a loan - establishment had sufficient capital
                 2 Application procedures were complex
                 3 Interest rates were not favorable
                 4 Collateral requirements were too high
                 5 Size of loan and maturity were insufficient
                 6 It is necessary to make informal payments to get bank loans
                 7 Did not think it would be approved
                 8 Other
K20A:
                -9 Don't know
                -8 Refused
                -6 APPLICATION STILL IN PROCESS
                -3 APPLICATION WITHDRAWN BY THE ESTABLISHMENT
                 1 Application was approved
                 2 Application was rejected
K21:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
K30:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
                 2 Moderate obstacle
                 3 Major obstacle
```

```
                    4 Very severe obstacle
ECAQ31E:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
H7A:
                   -9 Don't know
                   -8 Refused
                    1 Strongly disagree
                    2 Tend to disagree
                    3 Tend to agree
                    4 Strongly agree
ECAJ1B:
                   -9 Don't know
                   -8 Refused
                    1 Strongly disagree
                    2 Tend to disagree
                    3 Tend to agree
                    4 Strongly agree
ECAJ1C:
                   -9 Don't know
                   -8 Refused
                    1 Strongly disagree
                    2 Tend to disagree
                    3 Tend to agree
                    4 Strongly agree
J2:
                   -9 Don't know
                   -8 Refused
J3:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
J4:
                   -9 Don't know
                   -8 Refused
```

```
J5:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
J6A:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
J6:
          -9 Don't know
          -8 Refused
J7A:
          -9 Don't know
          -8 Refused
          -7 No answer
J10:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
J11:
          -9 Don't know
          -6 STILL IN PROCESS
          -5 APPLICATION DENIED
J12:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
J13:
          -9 Don't know
          -8 Refused
           1 Yes
           2 No
J14:
          -9 Don't know
```

```
                -6 STILL IN PROCESS
                -5 APPLICATION DENIED
J15:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
J30A:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
                 2 Moderate obstacle
                 3 Major obstacle
                 4 Very severe obstacle
J30B:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
                 2 Moderate obstacle
                 3 Major obstacle
                 4 Very severe obstacle
ECAJ31B1:
                -9 Don't know
                -8 Refused
                 1 Increase
                 2 Remain the same
                 3 Decrease
ECAJ31B2:
                -9 Don't know
                -8 Refused
ECAJ31B3:
                -9 Don't know
                -8 Refused
J30C:
```

```
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
                 2 Moderate obstacle
                 3 Major obstacle
                 4 Very severe obstacle
ECAJ31C1:
                -9 Don't know
                -8 Refused
                 1 Increase
                 2 Remain the same
                 3 Decrease
ECAJ31C2:
                -9 Don't know
                -8 Refused
ECAJ31C3:
                -9 Don't know
                -8 Refused
J30E:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
                 2 Moderate obstacle
                 3 Major obstacle
                 4 Very severe obstacle
J30F:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 0 No obstacle
                 1 Minor obstacle
                 2 Moderate obstacle
                 3 Major obstacle
                 4 Very severe obstacle
```

```
ECAJ31F1:
            -9 Don't know
            -8 Refused
             1 Increase
             2 Remain the same
             3 Decrease
ECAJ31F2:
            -9 Don't know
            -8 Refused
ECAJ31F3:
            -9 Don't know
            -8 Refused
H30:
            -9 Don't know
            -8 Refused
            -7 DOES NOT APPLY
             0 No obstacle
             1 Minor obstacle
             2 Moderate obstacle
             3 Major obstacle
             4 Very severe obstacle
ECAH31A1:
            -9 Don't know
            -8 Refused
             1 Increase
             2 Remain the same
             3 Decrease
ECAH31A2:
            -9 Don't know
            -8 Refused
ECAH31A3:
            -9 Don't know
            -8 Refused
ECAQ39:
            -9 Don't know
            -8 Refused
             1 Never
             2 Seldom
```

```
                3 Sometimes
                4 Frequently
                5 Very frequently
                6 Always
ECAQ41A:
               -9 Don't know
               -8 Refused
                1 Never
                2 Seldom
                3 Sometimes
                4 Frequently
                5 Very frequently
                6 Always
ECAQ41B:
               -9 Don't know
               -8 Refused
                1 Never
                2 Seldom
                3 Sometimes
                4 Frequently
                5 Very frequently
                6 Always
ECAQ41C:
               -9 Don't know
               -8 Refused
                1 Never
                2 Seldom
                3 Sometimes
                4 Frequently
                5 Very frequently
                6 Always
ECAQ44A:
               -9 Don't know
               -8 Refused
               -7 DOES NOT APPLY
                1 No impact
                2 Minor impact
                3 Moderate impact
```

```
                    4 Major impact
                    5 Decisive impact
ECAQ44B:
                   -9 Don't know
                   -8 Refused
                   -7 DOES NOT APPLY
                    1 No impact
                    2 Minor impact
                    3 Moderate impact
                    4 Major impact
                    5 Decisive impact
ECAQ44C:
                   -9 Don't know
                   -8 Refused
                   -7 DOES NOT APPLY
                    1 No impact
                    2 Minor impact
                    3 Moderate impact
                    4 Major impact
                    5 Decisive impact
ECAR16A:
                   -9 Don't know
                   -8 Refused
ECAR17A:
                   -9 Don't know
                   -8 Refused
                   -7 DOES NOT APPLY
                    1 Yes
                    2 No
ECAR17B:
                   -9 Don't know
                   -8 Refused
                   -7 DOES NOT APPLY
                    1 Yes
                    2 No
ECAR17C:
                   -9 Don't know
                   -8 Refused
```

```
            -7 DOES NOT APPLY
             1 Yes
             2 No
ECAR18:
            -9 Don't know
            -8 Refused
             1 Yes
             2 No
ECAR20:
            -9 Don't know
            -8 Refused
            -7 DOES NOT APPLY
             1 No need for external consultants
             2 External consultants are too expensive
             3 External consultants do not offer the services needed
             4 There are no external consultants available
             5 Not aware of consultancy services offered
             6 Other_ SPONTANEOUS - please specify
L8:
            -9 Don't know
            -8 Refused
             1 Less than one month
L9A1:
            -9 Don't know
            -8 Refused
L9A2:
            -9 Don't know
            -8 Refused
            -7 NO FEMALE PRODUCTION WORKERS
ECAQ69:
            -9 Don't know
            -8 Refused
L10:
            -9 Don't know
            -8 Refused
             1 Yes
             2 No
L11A:
```

```
                   -9 Don't know
                   -8 Refused
L11B:
                   -9 Don't know
                   -8 Refused
L30A:
                   -9 Don't know
                   -8 Refused
                   -7 DOES NOT APPLY
                    0 No obstacle
                    1 Minor obstacle
                    2 Moderate obstacle
                    3 Major obstacle
                    4 Very severe obstacle
ECAL31A1:
                   -9 Don't know
                   -8 Refused
                    1 Increase
                    2 Remain the same
                    3 Decrease
ECAL31A2:
                   -9 Don't know
                   -8 Refused
ECAL31A3:
                   -9 Don't know
                   -8 Refused
L30B:
                   -9 Don't know
                   -8 Refused
                   -7 DOES NOT APPLY
                    0 No obstacle
                    1 Minor obstacle
                    2 Moderate obstacle
                    3 Major obstacle
                    4 Very severe obstacle
ECAL31B1:
                   -9 Don't know
                   -8 Refused
```

```
              1 Increase
              2 Remain the same
              3 Decrease
ECAL31B2:
              -9 Don't know
              -8 Refused
ECAL31B3:
              -9 Don't know
              -8 Refused
M1A:
              -9 Don't know
              -8 Refused
              -7 DOES NOT APPLY
               1 Access to finance
               2 Access to land
               3 Business licensing and permits
               4 Corruption
               5 Courts
               6 Crime_ theft and disorder
               7 Customs and trade regulations
               8 Electricity
               9 Inadequately educated workforce
              10 Labor regulations
              11 Political instability
              12 Practices of competitors in the informal sector
              13 Tax administration
              14 Tax rates
              15 Transport
M1D:
              -8 Refused
               1 Option 1
               2 Option 2
               3 Option 3
ECAS1A:
              -9 Don't know
              -8 Refused
               1 Increase
               2 Stay the same
```

```
                        3 Decrease
ECAS1B:
                       -9 Don't know
                       -8 Refused
ECAS1C:
                       -9 Don't know
                       -8 Refused
VIN1A:
                       -9 Don't know
                       -8 Refused
                       -7 DOES NOT APPLY
                        0 No obstacle
                        1 Minor obstacle
                        2 Moderate obstacle
                        3 Major obstacle
                        4 Very severe obstacle
VIN1B:
                       -9 Don't know
                       -8 Refused
                       -7 DOES NOT APPLY
                        0 No obstacle
                        1 Minor obstacle
                        2 Moderate obstacle
                        3 Major obstacle
                        4 Very severe obstacle
VIN1C:
                       -9 Don't know
                       -8 Refused
                       -7 DOES NOT APPLY
                        0 No obstacle
                        1 Minor obstacle
                        2 Moderate obstacle
                        3 Major obstacle
                        4 Very severe obstacle
VIN1D:
                       -9 Don't know
                       -8 Refused
                       -7 DOES NOT APPLY
```

```
                0 No obstacle
                1 Minor obstacle
                2 Moderate obstacle
                3 Major obstacle
                4 Very severe obstacle
VIN1E:
               -9 Don't know
               -8 Refused
               -7 DOES NOT APPLY
                0 No obstacle
                1 Minor obstacle
                2 Moderate obstacle
                3 Major obstacle
                4 Very severe obstacle
A15A2A:
               -8 Refused
ECAA15A4:
               -8 Refused
A15A3A:
               -8 Refused
                1 Male
                2 Female
A15A2B:
               -8 Refused
               -7 does not apply code
V294_A:
               -8 Refused
               -7 does not apply code
A15A3B:
               -8 Refused
               -7 does not apply code
                1 Male
                2 Female
A15A2C:
               -8 Refused
               -7 does not apply code
V298_A:
               -8 Refused
```

```
                -7 does not apply code
A15A3C:
                -8 Refused
                -7 does not apply code
                 1 Male
                 2 Female
A16:
                -8 Refused
                 1 Truthful
                 2 Somewhat truthful
                 3 Not truthful
A17:
                -8 Refused
                 1 Are taken directly from establishment records
                 2 Are estimates computed with some precision
                 3 Are arbitrary and unreliable numbers
                 4 Are partially taken directly from establishment records and partially estimated
A18:
                -8 Refused
                 1 One visit in face-to-face interview with one person
                 2 One visit in face-to-face interview with different managers/staff
                 3 Several visits
A19H:
                -8 Refused
A19M:
                -8 Refused
INNOV:
                -8 Refused
                 1 Yes
                 2 No
A23:
                -8 Refused
                 1 Face-to-face interview_ immediately after the main survey
                 2 Face-to-face interview_ second visit
                 3 Phone interview
                 4 Other_ please can you specify
ECAO1A:
                -9 Don't know
```

```
                      -8 Refused
ECAO2A:
                      -9 Don't know
                      -8 Refused
                       1 Yes
                       2 No
ECAO2B:
                      -9 Don't know
                      -8 Refused
                       1 Yes
                       2 No
ECAO2C:
                      -9 Don't know
                      -8 Refused
                       1 Yes
                       2 No
ECAO3A:
                      -9 Don't know
                      -8 Refused
                      -7 DOES NOT APPLY
                       1 Yes
                       2 No
ECAO3B:
                      -9 Don't know
                      -8 Refused
                      -7 DOES NOT APPLY
                       1 Yes
                       2 No
ECAO3C:
                      -9 Don't know
                      -8 Refused
                      -7 DOES NOT APPLY
                       1 Yes
                       2 No
ECAO3D:
                      -9 Don't know
                      -8 Refused
                      -7 DOES NOT APPLY
```

```
                1 Yes
                2 No
ECAO3E:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 1 Yes
                 2 No
ECAO3F:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 1 Yes
                 2 No
ECAO3G:
                -9 Don't know
                -8 Refused
                -7 DOES NOT APPLY
                 1 Yes
                 2 No
ECAO4:
                -9 Don't know
                -8 Refused
                -6 ALL NEW OR SIGNIFICANTLY IMPROVED PRODUCTS WERE INTRODUCED IN THE CURRENT FISCAL YEAR
ECAO5:
                -9 Don't know
                -8 Refused
                 1 Developed or adapted by this establishment_ from its own ideas
                 2 Licensed products or services from another firm
                 3 Developed in cooperation with domestic suppliers
                 4 Developed in cooperation with suppliers abroad
                 5 Developed in cooperation with domestic client firms
                 6 Developed in cooperation with client firms abroad
                 7 Developed in cooperation with external academic or research institutions
                 8 Introduced the establishment's own version of a product or service already supplied (
> by another firm)
                 9 Other_ SPONTANEOUS - please specify
ECAO6:
```

```
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO7A:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO7B:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO7C:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO9A:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO9B:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO9C:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO10A:
                -9 Don't know
                -8 Refused
                 1 Yes
```

```
                2 No
ECAO10B:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO10C:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO10D:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO11:
                -9 Don't know
                -8 Refused
                 1 Developed or adapted by this establishment_ from its own ideas
                 2 Licensed products or services from another firm
                 3 Developed in cooperation with domestic suppliers
                 4 Developed in cooperation with suppliers abroad
                 5 Developed in cooperation with domestic client firms
                 6 Developed in cooperation with client firms abroad
                 7 Developed in cooperation with external academic or research institutions
                 8 Introduced the establishment's own version of a product or service already supplied (
> by another firm)
                 9 Other_ SPONTANEOUS - please specify
ECAO12:
                -9 Don't know
                -8 Refused
                 1 Yes
                 2 No
ECAO13:
                -9 Don't know
                -8 Refused
                -7 NO COMPETITORS
```

```
                   1 My firm's technology is less advanced than that of my main competitor
                   2 My firm's technology is about the same as that of my main competitor
                   3 My firm's technology is more advanced than that of my main competitor
ECAO16:
                  -9 Don't know
                  -8 Refused
                   1 Yes
                   2 No
ECAO18:
                  -9 Don't know
                  -8 Refused
                   1 Yes
                   2 No
ECAO20:
                  -9 Don't know
                  -8 Refused
                   1 Yes
                   2 No
ECAO21:
                  -9 Don't know
                  -8 Refused
                   1 A (COUNTRY) firm
                   2 A (COUNTRY) research institute or university
                   3 A foreign firm
                   4 A foreign research institute or university
                   5 Other
ECAO22A:
                  -9 Don't know
                  -8 Refused
ECAO22B:
                  -9 Don't know
                  -8 Refused
                  -7 THE ESTABLISHMENT WAS NOT IN BUSINESS THREE YEARS AGO
ECAO23A:
                  -9 Don't know
                  -8 Refused
                   1 Yes
                   2 No
```

ECAO23B:
          -9 Don't know
          -8 Refused
           1 Yes_ for a patent only
           2 Yes_ for a trademark only
           3 Yes_ for both a patent and a trademark
           4 No
ECAO23D:
          -9 Don't know
          -8 Refused
           1 Yes_ for a patent only
           2 Yes_ for a trademark only
           3 Yes_ for both a patent and a trademark
           4 No
ECAR1:
          -9 Don't know
          -8 Refused
          -7 DOES NOT APPLY
           1 We fixed it but did not take further action
           2 We fixed it and took action to make sure it did not happen again
           3 We fixed it and took action to make sure that it did not happen again_ and had a cont
> inuous improvement process to antic
           4 No action was taken
ECAR11:
          -9 Don't know
          -8 Refused
          -7 DOES NOT APPLY
           1 Their own performance as measured by production targets
           2 Their team or shift performance as measured by production targets
           3 Their establishment's performance as measured by production targets
           4 Their company's performance as measured by production targets
           5 No performance bonuses
ECAR13:
          -9 Don't know
          -8 Refused
          -7 DOES NOT APPLY (NO PROMOTIONS OF NON-MANAGERS IN THE LAST COMPLETE FISCAL YEAR)
           1 Promotions were based solely on performance and ability
           2 Promotions were based partly on performance and ability_ and partly on other factors

```
> (for example_ tenure or family conn
         3 Promotions were based mainly on factors other than performance and ability (for examp
> le_ tenure or family connections)
         4 Non-managers are normally not promoted
ECAR15:
         -9 Don't know
         -8 Refused
         -7 DOES NOT APPLY (NO UNDER-PERFORMING NON-MANAGERS IN THE LAST COMPLETE FISCAL YEAR)
          1 Within 6 months of identifying non-manager under-performance
          2 After 6 months of identifying non-manager under-performance
          3 Rarely or never
A24:
         -8 Refused
          1 Yes
          2 No
valllabel:
         -9 Don't know
         -8 Refusal
         -7 Does not apply
ECAT1:
         -8 Refused
          1 Yes
          2 No
ECAT2:
         -8 Refused
          1 Yes
          2 No
ECAT3:
         -8 Refused
          1 Yes
          2 No
ECAT4:
         -8 Refused
          1 Yes
          2 No
ECAT5:
         -8 Refused
          1 Yes
```

```
                 2 No
ECAT6:
                -8 Refused
                 1 Yes
                 2 No
ECAT7:
                -8 Refused
                 1 Yes
                 2 No
ECAT8:
                -8 Refused
                 1 Yes
                 2 No
ECAT9:
                -8 Refused
                 1 Yes
                 2 No
ECAT10:
                -8 Refused
                 1 Yes
                 2 No
ECAT11:
                -8 Refused
                 1 Yes
                 2 No
ECAT12:
                -8 Refused
                 1 Yes
                 2 No
ECAT11B:
                 1 Found it offensive
                 2 Found it a waste of time
                 3 Did not understand the experiment
                 4 OTHER (SPONTANEOUS-SPECIFY)
ECAZ1:
                -9 Don't know
                -8 Refused
                 1 Yes
```

```
                    2 No
ECAZ3:
                   -9 Don't know
                   -8 Refused
                    1 Primary school or less
                    2 Secondary school
                    3 Bachelor
                    4 Master degree
                    5 Doctorate
ECAZ4:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
ECAZ5:
                   -9 Don't know
                   -8 Refused
ECAZ6A:
                   -9 Don't know
                   -8 Not applicable
ECAZ6B:
                   -9 Don't know
                   -8 Not applicable
ECAZ6C:
                   -9 Don't know
                   -8 Not applicable
ECAZ6D:
                   -9 Don't know
                   -8 Not applicable
ECAZ7:
                   -9 Don't know
                   -8 Refused
                    1 Yes
                    2 No
ECAZ8:
                   -9 Don't know
                   -8 Refused
                    1 By founding the establishment (individually or with partners)
```

```
              2 By buying shares
              3 By joining family owned firm
              4 Other - specify
ECAZ9:
              -9 Don't know
              -8 Refused
               1 Heritage
               2 Marriage
               3 Other - specify
ECAZ10:
              -9 Don't know
              -8 Refused
               1 Business opportunity
               2 Family tradition
               3 Discontent with previous job
               4 Previous business failed
               5 More flexible working hours
               6 New job offers more independence in decision making
               7 Other - specify
ECAZ11:
              -9 Don't know
              -8 Refused
               1 Employed in the formal sector
               2 Self-employed in the formal sector
               3 Employed in the informal sector
               4 Self-employed in the informal sector
               5 Entrepreneur
               6 Unemployed
               7 Other - specify
ECAZ12:
              -9 Don't know
              -8 Refused
               1 Yes
               2 No
ECAZ13:
              -9 Don't know
              -8 Refused
               1 The largest owner is the main decision maker
```

```
                    2 The owners or partners  are the main decision makers
                    3 The board of directors  is the main decision maker
ECAZ14:
                    -9 Don't know
                    -8 Refused
                     1 Yes
                     2 No
ECAZ15:
                    -9 Don't know
                    -8 Refused
e2b:
                    -9 Don't know
                    -4 Too Many To Count
VEB1A:
                    -9 Don't know
                    -7 Does not apply
                     1 Know well
                     2 Heard something
                     3 Don't know anything
VEB1B:
                    -9 Don't know
                    -7 Does not apply
                     1 Know well
                     2 Heard something
                     3 Don't know anything
VEB1C:
                    -9 Don't know
                    -7 Does not apply
                     1 Know well
                     2 Heard something
                     3 Don't know anything
VEB1D:
                    -9 Don't know
                    -7 Does not apply
                     1 Know well
                     2 Heard something
                     3 Don't know anything
VEB1E:
```

```
          -9 Don't know
          -7 Does not apply
           1 Know well
           2 Heard something
           3 Don't know anything
VEB2:
          -9 Don't know
           1 Yes
           2 No
           3 I am not aware of Vnesheconombank projects
VEB3:
          -9 Don't know
          -8 Refusal
          -7 Does not apply
           1 Yes
           2 No
VEB4:
          -9 Don't know
          -8 Refusal
          -7 Does not apply
VEB5A:
          -9 Don't know
          -7 Does not apply
           1 None
           2 Minor
           3 Moderate
           4 Major
           5 Severe
VEB5B:
          -9 Don't know
          -7 Does not apply
           1 None
           2 Minor
           3 Moderate
           4 Major
           5 Severe
VEB5C:
          -9 Don't know
```

```
           -7 Does not apply
            1 None
            2 Minor
            3 Moderate
            4 Major
            5 Severe
VEB5D:
           -9 Don't know
           -7 Does not apply
            1 None
            2 Minor
            3 Moderate
            4 Major
            5 Severe
VEB5E:
           -9 Don't know
           -7 Does not apply
            1 None
            2 Minor
            3 Moderate
            4 Major
            5 Severe
VEB6:
           -9 Don't know
           -8 Refusal
           -7 Does not apply
            1 Yes
            2 No
VEB7:
           -9 Don't know
           -7 Does not apply
            1 Absolutely transparent
            2 Mostly transparent
            3 Sometimes transparent, sometimes non-transparent
            4 Mostly non-transparent
            5 Absolutely non-transparent
A15A3D:
           -9 Don't know
```

```
-8 Refusal
-7 Does not apply
 1 Male
 2 Female
```