

Package ‘jvnVaR’

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Type Package

Title Value at Risk

Version 1.0

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Description Many method to compute, predict and back-test VaR. For more detail, see the report: Value at Risk <researchgate.net>.

License GPL-3

Depends R(>= 2.10.0), stats, utils

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jvnVaR-package *Value at risk package.*

Description

Provide many method to compute, predict and back-test VaR.

More about what it does, see the report: Value at Risk.<researchgate.net>

Details

Package: jvnVaR
Type: Package
Version: 1.0
Date: 2015-08-10
License: GPL-3

Using command 'jListFunctions()' to know its useful functions.

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References

See the report: Value at Risk.<Researchgate.net>

See Also

https://www.researchgate.net/profile/Vu_Hung4

dataSelected *Price table.*

Description

A set of stock price on Vietnam Security Market.

Usage

```
data("dataSelected")
```

Format

A data frame with 1827 observations on the following 687 variables.

```
dateList a factor with levels 2009-01-01 2009-01-02 2009-01-03 2009-01-04 2009-01-05
2009-01-06 2009-01-07 2009-01-08 2009-01-09 2009-01-10 2009-01-11 2009-01-12
2009-01-13 2009-01-14 2009-01-15 2009-01-16 2009-01-17 2009-01-18 2009-01-19
2009-01-20 2009-01-21 2009-01-22 2009-01-23 2009-01-24 2009-01-25 2009-01-26
2009-01-27 2009-01-28 2009-01-29 2009-01-30 2009-01-31 2009-02-01 2009-02-02
2009-02-03 2009-02-04 2009-02-05 2009-02-06 2009-02-07 2009-02-08 2009-02-09
2009-02-10 2009-02-11 2009-02-12 2009-02-13 2009-02-14 2009-02-15 2009-02-16
2009-02-17 2009-02-18 2009-02-19 2009-02-20 2009-02-21 2009-02-22 2009-02-23
2009-02-24 2009-02-25 2009-02-26 2009-02-27 2009-02-28 2009-03-01 2009-03-02
2009-03-03 2009-03-04 2009-03-05 2009-03-06 2009-03-07 2009-03-08 2009-03-09
2009-03-10 2009-03-11 2009-03-12 2009-03-13 2009-03-14 2009-03-15 2009-03-16
2009-03-17 2009-03-18 2009-03-19 2009-03-20 2009-03-21 2009-03-22 2009-03-23
2009-03-24 2009-03-25 2009-03-26 2009-03-27 2009-03-28 2009-03-29 2009-03-30
2009-03-31 2009-04-01 2009-04-02 2009-04-03 2009-04-04 2009-04-05 2009-04-06
2009-04-07 2009-04-08 2009-04-09 2009-04-10 2009-04-11 2009-04-12 2009-04-13
2009-04-14 2009-04-15 2009-04-16 2009-04-17 2009-04-18 2009-04-19 2009-04-20
2009-04-21 2009-04-22 2009-04-23 2009-04-24 2009-04-25 2009-04-26 2009-04-27
2009-04-28 2009-04-29 2009-04-30 2009-05-01 2009-05-02 2009-05-03 2009-05-04
2009-05-05 2009-05-06 2009-05-07 2009-05-08 2009-05-09 2009-05-10 2009-05-11
2009-05-12 2009-05-13 2009-05-14 2009-05-15 2009-05-16 2009-05-17 2009-05-18
2009-05-19 2009-05-20 2009-05-21 2009-05-22 2009-05-23 2009-05-24 2009-05-25
2009-05-26 2009-05-27 2009-05-28 2009-05-29 2009-05-30 2009-05-31 2009-06-01
2009-06-02 2009-06-03 2009-06-04 2009-06-05 2009-06-06 2009-06-07 2009-06-08
2009-06-09 2009-06-10 2009-06-11 2009-06-12 2009-06-13 2009-06-14 2009-06-15
2009-06-16 2009-06-17 2009-06-18 2009-06-19 2009-06-20 2009-06-21 2009-06-22
2009-06-23 2009-06-24 2009-06-25 2009-06-26 2009-06-27 2009-06-28 2009-06-29
2009-06-30 2009-07-01 2009-07-02 2009-07-03 2009-07-04 2009-07-05 2009-07-06
2009-07-07 2009-07-08 2009-07-09 2009-07-10 2009-07-11 2009-07-12 2009-07-13
2009-07-14 2009-07-15 2009-07-16 2009-07-17 2009-07-18 2009-07-19 2009-07-20
2009-07-21 2009-07-22 2009-07-23 2009-07-24 2009-07-25 2009-07-26 2009-07-27
2009-07-28 2009-07-29 2009-07-30 2009-07-31 2009-08-01 2009-08-02 2009-08-03
2009-08-04 2009-08-05 2009-08-06 2009-08-07 2009-08-08 2009-08-09 2009-08-10
2009-08-11 2009-08-12 2009-08-13 2009-08-14 2009-08-15 2009-08-16 2009-08-17
2009-08-18 2009-08-19 2009-08-20 2009-08-21 2009-08-22 2009-08-23 2009-08-24
2009-08-25 2009-08-26 2009-08-27 2009-08-28 2009-08-29 2009-08-30 2009-08-31
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2009-09-29 2009-09-30 2009-10-01 2009-10-02 2009-10-03 2009-10-04 2009-10-05
2009-10-06 2009-10-07 2009-10-08 2009-10-09 2009-10-10 2009-10-11 2009-10-12
2009-10-13 2009-10-14 2009-10-15 2009-10-16 2009-10-17 2009-10-18 2009-10-19
2009-10-20 2009-10-21 2009-10-22 2009-10-23 2009-10-24 2009-10-25 2009-10-26
2009-10-27 2009-10-28 2009-10-29 2009-10-30 2009-10-31 2009-11-01 2009-11-02
2009-11-03 2009-11-04 2009-11-05 2009-11-06 2009-11-07 2009-11-08 2009-11-09
```


2013-07-16 2013-07-17 2013-07-18 2013-07-19 2013-07-20 2013-07-21 2013-07-22
2013-07-23 2013-07-24 2013-07-25 2013-07-26 2013-07-27 2013-07-28 2013-07-29
2013-07-30 2013-07-31 2013-08-01 2013-08-02 2013-08-03 2013-08-04 2013-08-05
2013-08-06 2013-08-07 2013-08-08 2013-08-09 2013-08-10 2013-08-11 2013-08-12
2013-08-13 2013-08-14 2013-08-15 2013-08-16 2013-08-17 2013-08-18 2013-08-19
2013-08-20 2013-08-21 2013-08-22 2013-08-23 2013-08-24 2013-08-25 2013-08-26
2013-08-27 2013-08-28 2013-08-29 2013-08-30 2013-08-31 2013-09-01 2013-09-02
2013-09-03 2013-09-04 2013-09-05 2013-09-06 2013-09-07 2013-09-08 2013-09-09
2013-09-10 2013-09-11 2013-09-12 2013-09-13 2013-09-14 2013-09-15 2013-09-16
2013-09-17 2013-09-18 2013-09-19 2013-09-20 2013-09-21 2013-09-22 2013-09-23
2013-09-24 2013-09-25 2013-09-26 2013-09-27 2013-09-28 2013-09-29 2013-09-30
2013-10-01 2013-10-02 2013-10-03 2013-10-04 2013-10-05 2013-10-06 2013-10-07
2013-10-08 2013-10-09 2013-10-10 2013-10-11 2013-10-12 2013-10-13 2013-10-14
2013-10-15 2013-10-16 2013-10-17 2013-10-18 2013-10-19 2013-10-20 2013-10-21
2013-10-22 2013-10-23 2013-10-24 2013-10-25 2013-10-26 2013-10-27 2013-10-28
2013-10-29 2013-10-30 2013-10-31 2013-11-01 2013-11-02 2013-11-03 2013-11-04
2013-11-05 2013-11-06 2013-11-07 2013-11-08 2013-11-09 2013-11-10 2013-11-11
2013-11-12 2013-11-13 2013-11-14 2013-11-15 2013-11-16 2013-11-17 2013-11-18
2013-11-19 2013-11-20 2013-11-21 2013-11-22 2013-11-23 2013-11-24 2013-11-25
2013-11-26 2013-11-27 2013-11-28 2013-11-29 2013-11-30 2013-12-01 2013-12-02
2013-12-03 2013-12-04 2013-12-05 2013-12-06 2013-12-07 2013-12-08 2013-12-09
2013-12-10 2013-12-11 2013-12-12 2013-12-13 2013-12-14 2013-12-15 2013-12-16
2013-12-17 2013-12-18 2013-12-19 2013-12-20 2013-12-21 2013-12-22 2013-12-23
2013-12-24 2013-12-25 2013-12-26 2013-12-27 2013-12-28 2013-12-29 2013-12-30
2013-12-31 2014-01-01

AAA a numeric vector
AAM a numeric vector
ABT a numeric vector
ACB a numeric vector
ACC a numeric vector
ACL a numeric vector
ADC a numeric vector
AGF a numeric vector
AGM a numeric vector
AGR a numeric vector
ALP a numeric vector
ALT a numeric vector
ALV a numeric vector
AMC a numeric vector
AME a numeric vector
AMV a numeric vector
ANV a numeric vector
APC a numeric vector

APG a numeric vector
API a numeric vector
APP a numeric vector
APS a numeric vector
ARM a numeric vector
ASA a numeric vector
ASIAGF a numeric vector
ASM a numeric vector
ASP a numeric vector
ATA a numeric vector
AVF a numeric vector
B82 a numeric vector
BBC a numeric vector
BBS a numeric vector
BCC a numeric vector
BCE a numeric vector
BCI a numeric vector
BDB a numeric vector
BED a numeric vector
BGM a numeric vector
BHC a numeric vector
BHS a numeric vector
BHT a numeric vector
BHV a numeric vector
BIC a numeric vector
BKC a numeric vector
BLF a numeric vector
BMC a numeric vector
BMI a numeric vector
BMP a numeric vector
BPC a numeric vector
BRC a numeric vector
BSC a numeric vector
BSI a numeric vector
BST a numeric vector
BT6 a numeric vector
BTH a numeric vector

BTP a numeric vector
BTS a numeric vector
BTT a numeric vector
BVG a numeric vector
BVH a numeric vector
BVS a numeric vector
BXH a numeric vector
C21 a numeric vector
C32 a numeric vector
C47 a numeric vector
C92 a numeric vector
CAN a numeric vector
CAP a numeric vector
CCI a numeric vector
CCL a numeric vector
CCM a numeric vector
CDC a numeric vector
CIC a numeric vector
CID a numeric vector
CIG a numeric vector
CII a numeric vector
CJC a numeric vector
CKV a numeric vector
CLC a numeric vector
CLG a numeric vector
CLP a numeric vector
CLW a numeric vector
CMC a numeric vector
CMG a numeric vector
CMI a numeric vector
CMS a numeric vector
CMT a numeric vector
CMV a numeric vector
CMX a numeric vector
CNG a numeric vector
CNT a numeric vector
COM a numeric vector

CPC a numeric vector
CSC a numeric vector
CSM a numeric vector
CT6 a numeric vector
CTA a numeric vector
CTB a numeric vector
CTC a numeric vector
CTG a numeric vector
CTI a numeric vector
CTM a numeric vector
CTN a numeric vector
CTS a numeric vector
CTV a numeric vector
CTX a numeric vector
CVN a numeric vector
CVT a numeric vector
CX8 a numeric vector
CYC a numeric vector
D11 a numeric vector
D2D a numeric vector
DAC a numeric vector
DAD a numeric vector
DAE a numeric vector
DAG a numeric vector
DBC a numeric vector
DBT a numeric vector
DC2 a numeric vector
DC4 a numeric vector
DCL a numeric vector
DCS a numeric vector
DCT a numeric vector
DHA a numeric vector
DHC a numeric vector
DHG a numeric vector
DHI a numeric vector
DHM a numeric vector
DHP a numeric vector

DHT a numeric vector
DIC a numeric vector
DID a numeric vector
DIG a numeric vector
DIH a numeric vector
DL1 a numeric vector
DLG a numeric vector
DLR a numeric vector
DMC a numeric vector
DNC a numeric vector
DNM a numeric vector
DNP a numeric vector
DNY a numeric vector
DPC a numeric vector
DPM a numeric vector
DPR a numeric vector
DQC a numeric vector
DRC a numeric vector
DRH a numeric vector
DRL a numeric vector
DSN a numeric vector
DST a numeric vector
DTA a numeric vector
DTL a numeric vector
DTT a numeric vector
DVP a numeric vector
DXG a numeric vector
DXP a numeric vector
DXV a numeric vector
DZM a numeric vector
EBS a numeric vector
ECI a numeric vector
EFI a numeric vector
EIB a numeric vector
EID a numeric vector
ELC a numeric vector
EMC a numeric vector

EVE a numeric vector
FCM a numeric vector
FCN a numeric vector
FDC a numeric vector
FDG a numeric vector
FDT a numeric vector
FIT a numeric vector
FLC a numeric vector
FMC a numeric vector
FPT a numeric vector
GAS a numeric vector
GDT a numeric vector
GGG a numeric vector
GIL a numeric vector
GLT a numeric vector
GMC a numeric vector
GMD a numeric vector
GMX a numeric vector
GSP a numeric vector
GTA a numeric vector
GTT a numeric vector
HAD a numeric vector
HAG a numeric vector
HAI a numeric vector
HAP a numeric vector
HAR a numeric vector
HAS a numeric vector
HAT a numeric vector
HAX a numeric vector
HBC a numeric vector
HBE a numeric vector
HBS a numeric vector
HCM a numeric vector
HCT a numeric vector
HDA a numeric vector
HDC a numeric vector
HDG a numeric vector

HDO a numeric vector
HEV a numeric vector
HGM a numeric vector
HHC a numeric vector
HHG a numeric vector
HHL a numeric vector
HHS a numeric vector
HJS a numeric vector
HLA a numeric vector
HLC a numeric vector
HLD a numeric vector
HLG a numeric vector
HLY a numeric vector
HMC a numeric vector
HMH a numeric vector
HNM a numeric vector
HOM a numeric vector
HOT a numeric vector
HPB a numeric vector
HPC a numeric vector
HPG a numeric vector
HPS a numeric vector
HQC a numeric vector
HRC a numeric vector
HSG a numeric vector
HSI a numeric vector
HST a numeric vector
HT1 a numeric vector
HTB a numeric vector
HTC a numeric vector
HTI a numeric vector
HTL a numeric vector
HTP a numeric vector
HTV a numeric vector
HU1 a numeric vector
HU3 a numeric vector
HUT a numeric vector

HVG a numeric vector
HVT a numeric vector
HVX a numeric vector
ICF a numeric vector
ICG a numeric vector
IDI a numeric vector
IDJ a numeric vector
IDV a numeric vector
IJC a numeric vector
ILC a numeric vector
IMP a numeric vector
INC a numeric vector
INN a numeric vector
ITA a numeric vector
ITC a numeric vector
ITD a numeric vector
ITQ a numeric vector
IVS a numeric vector
JVC a numeric vector
KAC a numeric vector
KBC a numeric vector
KBT a numeric vector
KDC a numeric vector
KDH a numeric vector
KHA a numeric vector
KHB a numeric vector
KHL a numeric vector
KHP a numeric vector
KKC a numeric vector
KLF a numeric vector
KLS a numeric vector
KMR a numeric vector
KMT a numeric vector
KSA a numeric vector
KSB a numeric vector
KSD a numeric vector
KSH a numeric vector

KSQ a numeric vector
KSS a numeric vector
KST a numeric vector
KTB a numeric vector
KTS a numeric vector
KTT a numeric vector
L10 a numeric vector
L14 a numeric vector
L18 a numeric vector
L35 a numeric vector
L43 a numeric vector
L44 a numeric vector
L61 a numeric vector
L62 a numeric vector
LAF a numeric vector
LAS a numeric vector
LBE a numeric vector
LBM a numeric vector
LCD a numeric vector
LCG a numeric vector
LCM a numeric vector
LCS a numeric vector
LDP a numeric vector
LGC a numeric vector
LGL a numeric vector
LHC a numeric vector
LHG a numeric vector
LIG a numeric vector
LIX a numeric vector
LM3 a numeric vector
LM7 a numeric vector
LM8 a numeric vector
L05 a numeric vector
LSS a numeric vector
LTC a numeric vector
LUT a numeric vector
MAC a numeric vector

MAFPF1 a numeric vector
MAX a numeric vector
MBB a numeric vector
MCC a numeric vector
MCF a numeric vector
MCG a numeric vector
MCL a numeric vector
MCO a numeric vector
MCP a numeric vector
MDC a numeric vector
MDG a numeric vector
MEC a numeric vector
MHC a numeric vector
MHL a numeric vector
MIC a numeric vector
MIH a numeric vector
MIM a numeric vector
MKV a numeric vector
MMC a numeric vector
MNC a numeric vector
MPC a numeric vector
MSN a numeric vector
MTG a numeric vector
NAG a numeric vector
NAV a numeric vector
NBB a numeric vector
NBC a numeric vector
NBP a numeric vector
NDN a numeric vector
NDX a numeric vector
NET a numeric vector
NGC a numeric vector
NHA a numeric vector
NHC a numeric vector
NHS a numeric vector
NHW a numeric vector
NIS a numeric vector

NKG a numeric vector
NLC a numeric vector
NLG a numeric vector
NNC a numeric vector
NPS a numeric vector
NSC a numeric vector
NSN a numeric vector
NST a numeric vector
NTL a numeric vector
NTP a numeric vector
NVB a numeric vector
NVC a numeric vector
NVN a numeric vector
NVT a numeric vector
OCH a numeric vector
OGC a numeric vector
ONE a numeric vector
OPC a numeric vector
ORS a numeric vector
PAC a numeric vector
PAN a numeric vector
PCG a numeric vector
PCT a numeric vector
PDC a numeric vector
PDN a numeric vector
PDR a numeric vector
PET a numeric vector
PFL a numeric vector
PGC a numeric vector
PGD a numeric vector
PGI a numeric vector
PGS a numeric vector
PGT a numeric vector
PHC a numeric vector
PHH a numeric vector
PHR a numeric vector
PHS a numeric vector

PID a numeric vector
PIT a numeric vector
PIV a numeric vector
PJC a numeric vector
PJT a numeric vector
PLC a numeric vector
PMC a numeric vector
PMS a numeric vector
PNC a numeric vector
POM a numeric vector
POT a numeric vector
PPC a numeric vector
PPE a numeric vector
PPG a numeric vector
PPI a numeric vector
PPP a numeric vector
PPS a numeric vector
PRC a numeric vector
PSC a numeric vector
PSD a numeric vector
PSG a numeric vector
PSI a numeric vector
PTB a numeric vector
PTC a numeric vector
PTI a numeric vector
PTK a numeric vector
PTL a numeric vector
PTM a numeric vector
PTS a numeric vector
PV2 a numeric vector
PVA a numeric vector
PVC a numeric vector
PVD a numeric vector
PVE a numeric vector
PVG a numeric vector
PVI a numeric vector
PVL a numeric vector

PVR a numeric vector
PVS a numeric vector
PVT a numeric vector
PVV a numeric vector
PVX a numeric vector
PXA a numeric vector
PXI a numeric vector
PXL a numeric vector
PXM a numeric vector
PXS a numeric vector
PXT a numeric vector
QCC a numeric vector
QCG a numeric vector
QHD a numeric vector
QNC a numeric vector
QST a numeric vector
QTC a numeric vector
RAL a numeric vector
RCL a numeric vector
RDP a numeric vector
REE a numeric vector
RHC a numeric vector
RIC a numeric vector
S12 a numeric vector
S55 a numeric vector
S74 a numeric vector
S91 a numeric vector
S96 a numeric vector
S99 a numeric vector
SAF a numeric vector
SAM a numeric vector
SAP a numeric vector
SAV a numeric vector
SBA a numeric vector
SBC a numeric vector
SBT a numeric vector
SC5 a numeric vector

SCD a numeric vector
SCJ a numeric vector
SCL a numeric vector
SCR a numeric vector
SD1 a numeric vector
SD2 a numeric vector
SD4 a numeric vector
SD5 a numeric vector
SD6 a numeric vector
SD7 a numeric vector
SD9 a numeric vector
SDA a numeric vector
SDB a numeric vector
SDC a numeric vector
SDD a numeric vector
SDE a numeric vector
SDG a numeric vector
SDH a numeric vector
SDN a numeric vector
SDP a numeric vector
SDT a numeric vector
SDU a numeric vector
SDY a numeric vector
SEB a numeric vector
SEC a numeric vector
SED a numeric vector
SEL a numeric vector
SFC a numeric vector
SFI a numeric vector
SFN a numeric vector
SGC a numeric vector
SGD a numeric vector
SGH a numeric vector
SGT a numeric vector
SHB a numeric vector
SHI a numeric vector
SHN a numeric vector

SHS a numeric vector
SIC a numeric vector
SII a numeric vector
SJ1 a numeric vector
SJC a numeric vector
SJD a numeric vector
SJE a numeric vector
SJM a numeric vector
SJS a numeric vector
SKS a numeric vector
SLS a numeric vector
SMA a numeric vector
SMC a numeric vector
SMT a numeric vector
SNG a numeric vector
SPI a numeric vector
SPM a numeric vector
SPP a numeric vector
SQC a numeric vector
SRA a numeric vector
SRB a numeric vector
SRC a numeric vector
SRF a numeric vector
SSC a numeric vector
SSG a numeric vector
SSI a numeric vector
SSM a numeric vector
ST8 a numeric vector
STB a numeric vector
STC a numeric vector
STG a numeric vector
STL a numeric vector
STP a numeric vector
STT a numeric vector
SVC a numeric vector
SVI a numeric vector
SVN a numeric vector

SVT a numeric vector
SZL a numeric vector
TAC a numeric vector
TAG a numeric vector
TAS a numeric vector
TBC a numeric vector
TBX a numeric vector
TC6 a numeric vector
TCL a numeric vector
TCM a numeric vector
TCO a numeric vector
TCR a numeric vector
TCS a numeric vector
TCT a numeric vector
TDC a numeric vector
TDH a numeric vector
TDN a numeric vector
TDW a numeric vector
TET a numeric vector
TH1 a numeric vector
THB a numeric vector
THG a numeric vector
THT a numeric vector
TIC a numeric vector
TIE a numeric vector
TIG a numeric vector
TIX a numeric vector
TJC a numeric vector
TKC a numeric vector
TKU a numeric vector
TLG a numeric vector
TLH a numeric vector
TMC a numeric vector
TMP a numeric vector
TMS a numeric vector
TMT a numeric vector
TMX a numeric vector

TNA a numeric vector
TNC a numeric vector
TNG a numeric vector
TNT a numeric vector
TPC a numeric vector
TPH a numeric vector
TPP a numeric vector
TRA a numeric vector
TRC a numeric vector
TS4 a numeric vector
TSB a numeric vector
TSC a numeric vector
TSM a numeric vector
TST a numeric vector
TTC a numeric vector
TTF a numeric vector
TTP a numeric vector
TTZ a numeric vector
TV1 a numeric vector
TV2 a numeric vector
TV3 a numeric vector
TV4 a numeric vector
TVD a numeric vector
TXM a numeric vector
TYA a numeric vector
UDC a numeric vector
UIC a numeric vector
UNI a numeric vector
V12 a numeric vector
V15 a numeric vector
V21 a numeric vector
VAT a numeric vector
VBC a numeric vector
VBH a numeric vector
VC1 a numeric vector
VC2 a numeric vector
VC3 a numeric vector

VC5 a numeric vector
VC6 a numeric vector
VC7 a numeric vector
VC9 a numeric vector
VCB a numeric vector
VCC a numeric vector
VCF a numeric vector
VCG a numeric vector
VCM a numeric vector
VCR a numeric vector
VCS a numeric vector
VCV a numeric vector
VDL a numeric vector
VDS a numeric vector
VE1 a numeric vector
VE2 a numeric vector
VE3 a numeric vector
VE4 a numeric vector
VE8 a numeric vector
VE9 a numeric vector
VFG a numeric vector
VFMVF4 a numeric vector
VFR a numeric vector
VGP a numeric vector
VGS a numeric vector
VHC a numeric vector
VHG a numeric vector
VHH a numeric vector
VHL a numeric vector
VIC a numeric vector
VID a numeric vector
VIE a numeric vector
VIG a numeric vector
VIP a numeric vector
VIS a numeric vector
VIT a numeric vector
VIX a numeric vector

VKC a numeric vector
VLA a numeric vector
VLF a numeric vector
VMC a numeric vector
VMD a numeric vector
VNA a numeric vector
VNC a numeric vector
VND a numeric vector
VNE a numeric vector
VNF a numeric vector
VNG a numeric vector
VNH a numeric vector
VNI a numeric vector
VNL a numeric vector
VNM a numeric vector
VNN a numeric vector
VNR a numeric vector
VNS a numeric vector
VNT a numeric vector
VOS a numeric vector
VPC a numeric vector
VPH a numeric vector
VPK a numeric vector
VRC a numeric vector
VSC a numeric vector
VSH a numeric vector
VSI a numeric vector
VST a numeric vector
VTB a numeric vector
VTC a numeric vector
VTF a numeric vector
VTL a numeric vector
VTO a numeric vector
VTS a numeric vector
VTV a numeric vector
VXB a numeric vector
WCS a numeric vector
XMC a numeric vector
YBC a numeric vector

Details

There are 687 stock codes. Some examples: AAA, AAM, ABT,...

Source

<http://www.cophieu68.vn/export.php> <https://www.vndirect.com.vn/portal/thong-ke-thi-truong-chung-khoan/lich-su-gia.shtml>

Examples

```
data(dataSelected)
```

dateList

Date list.

Description

Date list.

Usage

```
data("dateList")
```

Format

The format is: chr [1:1827] "2009-01-01" "2009-01-02" "2009-01-03" "2009-01-04" ...

Source

Vietnam stock market.

References

See the report.

Examples

```
data(dateList)
```

Description

Using when you need a series of price to do back-testing.
This function using normal return model to simulate price.
Related report: Value at Risk.<researchgate.net>

Usage

```
jMCPri(s0, mu, sigma, m)
```

Arguments

s0	The initial price or the price at the first day.
mu	Expected (or drift) of return.
sigma	Standard deviation (or volatility) of return.
m	Number of observations.

Value

An array of price.

Note

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Author(s)

Hung Vu

References

Value at Risk.(reserchgate.net)

See Also

https://www.researchgate.net/profile/Vu_Hung4

Examples

```
s0 <- 100  
mu <- 0.02  
sigma <- 0.1  
m <- 1000  
jMCPri (s0, mu, sigma, m)
```

Description

Using when you need a series of price to do back-testing.

This function using normal return model to simulate price under price limit condition.

Price limit condition require that the return on price is limited.

Related report: Value at Risk.<researchgate.net>

Usage

```
jMCPriLim(s0, L, U, mu, sigma,m)
```

Arguments

s0	The initial price or the price at the first day.
L	Lower limit of return.
U	Upper limit of return.
mu	Expected (or mean) of return.
sigma	Standard deviation (or volatility) of return.
m	Number of observations.

Value

An array of price.

Note

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Author(s)

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References

Value at Risk.(reserchgate.net)

See Also

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Examples

```
s0 <- 100
mu <- 0.02
sigma <- 0.1
m <- 1000
L <- -0.07
U <- 0.07
jMCPriLim (s0, L, U, mu, sigma, m)
```

jPrice

Historical Price Function

Description

Take out a price series from database.

See the report: Value at Risk.<researchgate.net>

Usage

```
jPrice(name)
```

Arguments

name Name of a stock. See list of stocks using jStockList()

Value

A price series.

Note

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Author(s)

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See Also

https://www.researchgate.net/profile/Vu_Hung4

Examples

```
jStockList()
jPrice('AAA')
```

jReturn

Return Function

Description

Compute returns from a price series of an asset.

Return is gain (or loss) rate from an investment to the asset in a time interval.

See the report: Value at Risk.<researchgate.net>

Usage

```
jReturn(s)
```

Arguments

s A price series.

Value

A return series.

Note

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Author(s)

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See Also

https://www.researchgate.net/profile/Vu_Hung4

Examples

```
y <- c(11, 12, 10, 13, 12, 14, 13, 15, 13, 14, 12)
s <- jReturn(y)
s
```

`jStockList`*Stocks List in Vietnam stock market.*

Description

Provide a list of Vietnamese stocks.

See the report: Value at Risk.<researchgate.net>

Usage

```
jStockList()
```

Value

A list of Vietnamese stocks

Note

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Author(s)

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See Also

https://www.researchgate.net/profile/Vu_Hung4

Examples

```
jStockList()
```

`jTestVaR`*VaR Back-testing*

Description

Provide some kinds of test for Value at risk.

The null hypothesis is the equation of the probability of loss cross over VaR and the given ruin level.

It will show how the calculated VaR can be accepted.

See the report: Value at Risk.<researchgate.net>

Usage

```
jTestVaR(Ret, VaR, p, test_significant, type)
```


Arguments

Ret	Return series use to back-test.
VaR	Value at Risk that has been calculated.
p	Given probability used to calculate VaR
test_significant	Significant level of the test.
type	Kinds of test. . p_value . pof . tuff . mixkup

Details

See the report.

Value

Statistic,Quantile and test result.

Note

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Author(s)

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See Also

https://www.researchgate.net/profile/Vu_Hung4

Examples

```
y <- c(11, 12, 10, 13, 12, 14, 13, 15, 13, 14, 12)
s <- jReturn(y)
alpha <- 0.2
h <- 0
v <- jVaR('non_adjust_hist',s,alpha,h)
jTestVaR(s, v, alpha, 0.05, 'p_value')
```

jVaR

*Value at Risk Function***Description**

Compute VaR by many methods.

See the report: Value at Risk.<researchgate.net>

Usage

```
jVaR(type, Return, Alpha, N_th_day)
```

Arguments

type	Computing method. . 'non_adjust_hist': Historical method without any adjustment. . 'grch11_hist': Historical method with adjustment by Garch(1,1) method. . 'ewhv_hist': Exponential Weighted method. . 'ewma_hist': Historical method with adjustment by EWMA method. . 'kernel_hist': Estimating density function using kernel fitting method. . 'grch11_kernel_hist': Kernel fitting method apply on return adjusted by Garch(1,1). . 'ewma_kernel_hist': Kernel fitting method apply on return adjusted by EWMA. . 'garch11': Garch(1,1) method. . 'normal': Normal return method. . 'mle_normal': Normal return method (Estimating by maximum likelihood method). . 'monte_carlo': Simulation method.
Return	A return series that computed from price series.
Alpha	Given probability of the event that loss exceeds VaR.
N_th_day	Time point of VaR computing (...,-1,0,1,...) . -1 : previous day . 0 : present . 1 : next day

Value

Value at Risk at the time point.

Note

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Author(s)

Hung Vu

References

Value at Risk.(researchgate.net)

See Also

https://www.researchgate.net/profile/Vu_Hung4

Examples

```
y <- c(11, 12, 10, 13, 12, 14, 13, 15, 13, 14, 12)
s <- jReturn(y)
alpha <- 0.2
h <- 0
v <- jVaR('non_adjust_hist',s,alpha,h)
```

jVaRLim

Value at Risk Function(under price limit condition)

Description

Compute VaR under price limit condition.

See the report: Value at Risk.<researchgate.net>

Usage

```
jVaRLim(Ret, L, U, alpha, type, h)
```

Arguments

Ret	A return series that computed from price series.
L	Lower limit.
U	Upper limit.
alpha	Given probability of the event that loss exceeds VaR.
type	Computing method. 'model': Garch(1,1) method. 'histl': Historical method with return series adjusted by Garch(1,1) method. 'simul': Simulation method.
h	Time point of VaR computing (...,-1,0,1,...) . -1 : previous day . 0 : present . 1 : next day

Value

Value at Risk at the time point.

Note

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Author(s)

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References

Value at Risk.(reserchgate.net)

See Also

https://www.researchgate.net/profile/Vu_Hung4

Examples

```
y <- c(11, 12, 10, 13, 12, 14, 13, 15, 13, 14, 12)
s <- jReturn(y)
alpha <- 0.2
h <- 0
L <- -0.13
U <- 0.16
v <- jVaRLim(s,L,U,alpha,'model',h)
```

stockList

Stock List.

Description

Stock List.

Usage

```
data("stockList")
```

Format

The format is: chr [1:691] "AAA" "AAM" "ABT" "ACB" "ACC" "ACL" "ADC" ...

Source

<http://www.cophieu68.vn/export.php> <https://www.vndirect.com.vn/portal/thong-ke-thi-truong-chung-khoan/lich-su-gia.shtml>

Examples

```
data(stockList)
```

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