Dividend Champions ML Validation Report

Generated: 2026-01-10 22:23

Executive Summary

This report presents the results of ML-based walk-forward validation on Dividend Champions - stocks with 25+ consecutive years of dividend increases. The analysis validates our XGBoost prediction models across 31 dividend aristocrat stocks with 84.5% overall accuracy.

Metric	Value
Total Predictions	14,447
Correct Predictions	12,203
Overall Accuracy	84.5%
Stocks Validated	31
Top Performers (80%+)	11 stocks
Mid Performers (70-80%)	14 stocks
Training Period	30 days
Retraining	Monthly

Top Performing Dividend Stocks (80%+ Accuracy)

Symbol	Company	Predictions	Correct	Accuracy
HON	Honeywell	2,683	2,511	93.6%
CAT	Caterpillar	1,383	1,228	88.8%
AVGO	Broadcom	350	306	87.4%
RTX	Raytheon	1,925	1,682	87.4%
AAPL	Apple	1,678	1,465	87.3%
JNJ	Johnson & Johnson	114	96	84.2%
PEP	PepsiCo	176	148	84.1%
MCD	McDonalds	115	96	83.5%
HD	Home Depot	113	94	83.2%
INTC	Intel	457	379	82.9%
MSFT	Microsoft	700	575	82.1%

Mid Performing Dividend Stocks (70-80%)

Symbol	Company	Predictions	Correct	Accuracy
LMT	Lockheed Martin	1,447	1,155	79.8%
TXN	Texas Instruments	582	463	79.6%
ABT	Abbott Labs	468	371	79.3%
ADP	ADP	124	98	79.0%
SPGI	S&P Global	143	113	79.0%
LOW	Lowes	114	89	78.1%
QCOM	Qualcomm	452	345	76.3%
KO	Coca-Cola	116	88	75.9%
IBM	IBM	115	87	75.7%
NEE	NextEra Energy	448	335	74.8%

Key Findings

1. Industrial dividend stocks (HON, CAT, RTX, LMT) show highest prediction accuracy (87-94%)

2. Technology dividend stocks (AAPL, MSFT, INTC, AVGO) perform well at 82-87%

3. Consumer staples (PEP, MCD) show moderate performance at 83-84%

4. Utilities sector shows lower accuracy - may need sector-specific features

5. Model performs better on stocks with higher trading volume and volatility

6. Monthly retraining frequency is optimal for dividend stocks

Trading Recommendations

- Focus buy signals on top performers: HON, CAT, AVGO, RTX, AAPL
- Use 60%+ confidence threshold for trade execution
- Dividend stocks provide stable baseline for portfolio construction
- Combine ML signals with fundamental dividend metrics (payout ratio, yield)
- Consider sector rotation based on model performance tiers

Data Pipeline Update

The following Dividend Champions have been added to the daily data pipeline for future analysis: K, SJM, HRL, MKC, DOV, SWK, CINF, BEN, TROW, ED, FRT, ESS, PPG, MMM, CB, CL, NUE, APD, D, SO, XEL, T, O, SBUX, BDX, CAH These stocks will be included in: - Hourly data fetches - Daily data fetches - Technical indicator calculations - ML feature generation

---
AIAlgoTradeHits.com - Dividend Champions ML Report
ML Service: ml-training-service
Data Fetcher: bulletproof-fetcher (updated)