

A Datasets

We use four publicly available datasets in our experiments, detailed below. The dataset statistics are shown in Table 3.

- **Reddit [22]:** A month’s worth of posts from users across the 984 most active subreddits, resulting in a total of 672,447 interactions from the 10,000 most active users. Each post’s content is transformed into a feature vector using LIWC [28]. This dataset also includes dynamic labels indicating whether users are banned from posting, with 366 true banned labels, marking a proportion of 0.05% of the interactions.
- **Wikipedia [22]:** Comprising one month of Wikipedia edits, this dataset captures interactions from users who have made edits on the 1,000 most edited pages, totaling 157,474 interactions from 8,227 users. Each interaction is represented as a 172-dimensional LIWC feature vector. Additionally, dynamic labels are provided to indicate temporary bans of users, with 217 positive banned labels among the interactions, equating to 0.14%.
- **Canadian Parliament (Can. Parl.) [16]:** This dynamic political network dataset records interactions between Members of Parliament (MPs) in Canada from 2006 to 2019, where nodes represent MPs and links indicate mutual “yes” votes on bills. The weight of a link reflects the frequency of mutual affirmative votes within a year.
- **UN Trade [29]:** Spanning over 30 years, this dataset documents food and agriculture trade between 181 nations. The links between nations are weighted by the normalized value of agriculture imports or exports, showing the intensity of trade relationships.

Table 3: Datasets. #N&L Feat. denotes node and link feature dimension.

Datasets	#Nodes	#Links	#N&L Feat.	Bipartite	Time Granularity	Label
Wikipedia	9,227	157,474	– & 172	True	Unix	2
Reddit	10,984	672,447	– & 172	True	Unix	2
Can. Parl.	734	74,478	– & 1	False	Years	–
UN Trade	255	507,497	– & 1	False	Years	–

B Hyperparameters

All three encoders use 100-dimensional time encoding and 172-dimensional output representation. TGN uses a 172-dimensional node memory and uses 2 graph attention heads like DyGFormer, with memory updates managed by Gated Recurrent Units (GRU). GraphMixer does not use node memory but instead has 2 MLP-Mixer layers and operates with a time gap of 2000. DyGFormer introduces a 50-dimensional neighbor co-occurrence encoding alongside the time encoding and employs 2 Transformer layers to process the input.

We perform the grid search to find the best settings of some critical hyperparameters. However, this step is conducted during training. Once the model is trained, the number of covered examples on the test dataset will vary significantly as θ changes because the model has not seen the test data during training. Nevertheless, with the selection scores for each interaction available, we sorted them and selected a θ value that aligns with the desired coverage. The

θ values range from 0 to 1. As the coverage decreases to 90%, 80%, and so on down to 50%, the uncertainty threshold θ also decreases accordingly.

We experimented with a wide range of β values as a hyperparameter and found that when β the value is less than 10, it produces a better result. We’re attaching the following table for TGN on the Wikipedia dataset to show the variation AUC w.r.t. different values of beta. Below is the comparison between β vs. AUC shown in Table 4.

Table 4: Effect of β on AUC at coverage 90%, 80% and 70%, respectively for TGN encoder on Wikipedia dataset

β	AUC@90	AUC@80	AUC@70
1	88	88.78	89.48
2	88.44	90.02	90.28
5	87.96	89.7	90.64
10	87.56	89.14	89.98
25	87.67	88.29	89.42
100	86.84	88.32	88.74

C Compute Statistics

We have compared compute statistics for different temporal graph encoders for the Can. Parl. dataset in table 5 on the link prediction task. We train a maximum of 100 epochs for training. Based on the following table, we have chosen to use TGN and GraphMixer as our baseline.

Table 5: Compute Statistics for Can. Parl. dataset on link prediction

TG Encoder	Train Time (Sec/epoch)	Test Time (Sec)	GPU Usage (MB)
TGN	9	1	668
TGAT	75	22	2800
GraphMixer	27	6	1708
CAWN	161	36	12114
DyGFormer	91	20	18326
TCL	15	1	1616
Jodie	4	1	640

D Additional Results

Tables 6 and 7 present the link prediction results for inductive AP and transductive AUC-ROC, respectively. We have added link prediction results for DyGFormer[43] on all four datasets in Table 8 for the transductive setting and Table 9 for the inductive setting. We have also added node classification results for DyGFormer in Table 10.

Table 6: AP for inductive dynamic link prediction with random, historical, and inductive negative sampling strategies for various coverage rates. The best and second-best performing results are emphasized by bold and underlined fonts.

NSS	Coverage (%)	TGN				GraphMixer			
		Wikipedia	Reddit	UN Trade	Can. Parl.	Wikipedia	Reddit	UN Trade	Can. Parl.
rnd	100	97.98 $\pm$ 0.08	97.34 $\pm$ 0.05	56.55 $\pm$ 2.24	57.21 $\pm$ 1.22	96.82 $\pm$ 0.06	95.13 $\pm$ 0.01	61.83 $\pm$ 0.09	59.38 $\pm$ 1.05
	90	99.08 $\pm$ 0.06	98.23 $\pm$ 0.14	63.23 $\pm$ 1.72	57.08 $\pm$ 2.88	98.03 $\pm$ 0.12	95.76 $\pm$ 0.14	68.16 $\pm$ 0.19	58.96 $\pm$ 0.85
	80	99.57 $\pm$ 0.07	98.79 $\pm$ 0.10	66.04 $\pm$ 3.86	57.77 $\pm$ 4.64	98.76 $\pm$ 0.08	96.76 $\pm$ 0.12	<u>70.97 $\pm$ 1.19</u>	58.83 $\pm$ 0.99
	70	99.77 $\pm$ 0.05	99.45 $\pm$ 0.09	<u>65.51 $\pm$ 2.31</u>	64.57 $\pm$ 8.02	<u>99.49 $\pm$ 0.14</u>	98.39 $\pm$ 0.23	70.54 $\pm$ 7.44	70.65 $\pm$ 3.30
	60	99.82 $\pm$ 0.06	<u>99.68 $\pm$ 0.04</u>	61.23 $\pm$ 5.83	69.82 $\pm$ 6.54	99.59 $\pm$ 0.12	98.75 $\pm$ 0.25	68.45 $\pm$ 9.95	76.29 $\pm$ 4.96
	50	<u>99.80 $\pm$ 0.08</u>	99.73 $\pm$ 0.04	60.69 $\pm$ 5.56	71.55 $\pm$ 7.14	99.46 $\pm$ 0.09	99.03 $\pm$ 0.29	78.39 $\pm$ 0.90	76.44 $\pm$ 2.39
hist	100	82.12 $\pm$ 1.37	61.59 $\pm$ 0.48	52.96 $\pm$ 1.27	56.75 $\pm$ 1.29	87.63 $\pm$ 0.28	61.73 $\pm$ 0.36	56.41 $\pm$ 0.95	58.64 $\pm$ 0.77
	90	84.97 $\pm$ 1.13	61.84 $\pm$ 0.66	59.12 $\pm$ 3.88	55.95 $\pm$ 2.40	91.30 $\pm$ 0.47	62.42 $\pm$ 0.29	60.48 $\pm$ 2.44	58.70 $\pm$ 0.90
	80	88.85 $\pm$ 0.83	63.02 $\pm$ 0.89	61.20 $\pm$ 4.00	56.47 $\pm$ 4.78	94.22 $\pm$ 1.03	63.66 $\pm$ 0.27	65.74 $\pm$ 4.66	58.85 $\pm$ 1.53
	70	92.42 $\pm$ 4.94	66.99 $\pm$ 4.34	58.80 $\pm$ 5.99	65.27 $\pm$ 9.09	96.01 $\pm$ 3.95	66.98 $\pm$ 3.44	74.08 $\pm$ 3.63	73.00 $\pm$ 2.67
	60	<u>94.81 $\pm$ 5.67</u>	<u>67.96 $\pm$ 3.89</u>	58.90 $\pm$ 4.34	<u>70.98 $\pm$ 6.00</u>	97.33 $\pm$ 4.50	<u>68.73 $\pm$ 3.33</u>	70.64 $\pm$ 1.50	<u>77.83 $\pm$ 4.37</u>
	50	96.63 $\pm$ 6.68	68.83 $\pm$ 6.00	<u>59.02 $\pm$ 5.16</u>	71.27 $\pm$ 8.94	94.79 $\pm$ 6.78	69.43 $\pm$ 3.38	82.22 $\pm$ 1.63	78.41 $\pm$ 1.74
ind	100	82.12 $\pm$ 1.38	61.59 $\pm$ 0.48	52.90 $\pm$ 1.25	56.78 $\pm$ 1.31	87.63 $\pm$ 0.28	61.74 $\pm$ 0.35	56.35 $\pm$ 0.93	58.63 $\pm$ 0.79
	90	84.98 $\pm$ 1.13	61.85 $\pm$ 0.66	59.06 $\pm$ 3.89	55.97 $\pm$ 2.41	91.30 $\pm$ 0.47	62.44 $\pm$ 0.28	60.31 $\pm$ 2.54	58.72 $\pm$ 0.92
	80	88.86 $\pm$ 0.82	63.01 $\pm$ 0.90	61.16 $\pm$ 3.98	56.53 $\pm$ 4.87	94.22 $\pm$ 1.03	63.69 $\pm$ 0.26	65.64 $\pm$ 4.79	58.89 $\pm$ 1.61
	70	92.45 $\pm$ 4.95	66.98 $\pm$ 4.35	58.78 $\pm$ 5.95	65.39 $\pm$ 9.15	96.01 $\pm$ 3.95	67.00 $\pm$ 3.44	74.13 $\pm$ 3.50	73.01 $\pm$ 2.65
	60	<u>94.80 $\pm$ 5.68</u>	<u>67.98 $\pm$ 3.88</u>	58.83 $\pm$ 4.36	<u>70.90 $\pm$ 6.02</u>	97.33 $\pm$ 4.51	<u>68.76 $\pm$ 3.31</u>	70.65 $\pm$ 1.47	<u>77.81 $\pm$ 4.34</u>
	50	96.64 $\pm$ 6.69	68.84 $\pm$ 5.99	<u>58.98 $\pm$ 5.22</u>	71.21 $\pm$ 8.90	94.79 $\pm$ 6.78	69.48 $\pm$ 3.35	82.16 $\pm$ 1.72	78.45 $\pm$ 1.73

Table 7: AUC for transductive dynamic link prediction with random, historical, and inductive negative sampling strategies for various coverage rates. The best and second-best performing results are emphasized by bold and underlined fonts.

NSS	Coverage (%)	TGN				GraphMixer			
		Wikipedia	Reddit	UN Trade	Can. Parl.	Wikipedia	Reddit	UN Trade	Can. Parl.
rnd	100	98.48 $\pm$ 0.07	98.59 $\pm$ 0.02	67.74 $\pm$ 1.66	77.94 $\pm$ 1.55	97.01 $\pm$ 0.07	97.20 $\pm$ 0.02	64.89 $\pm$ 0.21	84.64 $\pm$ 0.57
	90	99.32 $\pm$ 0.05	99.31 $\pm$ 0.06	70.24 $\pm$ 0.92	80.17 $\pm$ 1.44	98.04 $\pm$ 0.08	97.63 $\pm$ 0.07	68.01 $\pm$ 0.21	85.39 $\pm$ 1.04
	80	99.75 $\pm$ 0.09	99.57 $\pm$ 0.06	74.50 $\pm$ 1.21	82.32 $\pm$ 2.21	98.72 $\pm$ 0.07	98.40 $\pm$ 0.03	70.52 $\pm$ 0.70	86.77 $\pm$ 0.94
	70	99.88 $\pm$ 0.06	99.85 $\pm$ 0.02	76.71 $\pm$ 1.64	82.05 $\pm$ 5.10	<u>99.63 $\pm$ 0.28</u>	99.41 $\pm$ 0.06	<u>71.36 $\pm$ 4.07</u>	<u>93.05 $\pm$ 1.10</u>
	60	<u>99.90 $\pm$ 0.04</u>	<u>99.90 $\pm$ 0.02</u>	<u>79.25 $\pm$ 1.86</u>	<u>88.03 $\pm$ 3.69</u>	99.72 $\pm$ 0.22	<u>99.59 $\pm$ 0.10</u>	69.69 $\pm$ 7.48	94.13 $\pm$ 0.94
	50	99.90 $\pm$ 0.02	99.92 $\pm$ 0.01	82.14 $\pm$ 1.18	89.69 $\pm$ 2.49	99.61 $\pm$ 0.19	99.72 $\pm$ 0.05	77.15 $\pm$ 2.89	92.91 $\pm$ 1.43
hist	100	83.01 $\pm$ 0.60	80.92 $\pm$ 0.18	63.78 $\pm$ 2.37	73.64 $\pm$ 2.14	88.00 $\pm$ 0.22	77.31 $\pm$ 0.27	63.40 $\pm$ 1.06	83.56 $\pm$ 2.13
	90	89.27 $\pm$ 0.41	84.50 $\pm$ 0.80	68.93 $\pm$ 0.88	77.51 $\pm$ 0.72	92.46 $\pm$ 0.57	79.94 $\pm$ 0.83	66.35 $\pm$ 1.82	86.34 $\pm$ 1.15
	80	94.43 $\pm$ 0.67	87.24 $\pm$ 0.50	72.87 $\pm$ 2.63	77.12 $\pm$ 2.51	95.50 $\pm$ 0.67	83.49 $\pm$ 0.59	69.23 $\pm$ 1.06	85.54 $\pm$ 2.00
	70	95.23 $\pm$ 6.09	89.86 $\pm$ 2.21	72.42 $\pm$ 4.33	76.69 $\pm$ 5.84	<u>97.35 $\pm$ 4.18</u>	85.97 $\pm$ 2.10	<u>72.67 $\pm$ 1.16</u>	92.43 $\pm$ 1.03
	60	<u>96.25 $\pm$ 6.11</u>	91.55 $\pm$ 2.31	<u>74.73 $\pm$ 1.93</u>	<u>83.84 $\pm$ 4.56</u>	97.87 $\pm$ 4.38	<u>87.94 $\pm$ 2.70</u>	70.61 $\pm$ 1.15	<u>92.35 $\pm$ 1.68</u>
	50	96.81 $\pm$ 6.82	<u>90.91 $\pm$ 2.69</u>	75.39 $\pm$ 1.98	86.68 $\pm$ 0.89	95.94 $\pm$ 5.50	89.17 $\pm$ 2.65	76.47 $\pm$ 3.75	92.23 $\pm$ 1.42
ind	100	82.76 $\pm$ 0.71	84.58 $\pm$ 0.33	66.06 $\pm$ 2.26	70.93 $\pm$ 2.25	84.93 $\pm$ 0.27	82.31 $\pm$ 0.24	67.06 $\pm$ 0.81	80.88 $\pm$ 1.28
	90	88.18 $\pm$ 0.59	89.34 $\pm$ 0.55	70.75 $\pm$ 0.93	75.64 $\pm$ 2.36	89.76 $\pm$ 0.39	84.96 $\pm$ 0.91	69.81 $\pm$ 1.52	83.37 $\pm$ 1.56
	80	93.18 $\pm$ 0.53	92.79 $\pm$ 0.93	75.36 $\pm$ 2.52	73.70 $\pm$ 5.28	93.81 $\pm$ 0.37	88.71 $\pm$ 0.33	73.27 $\pm$ 1.02	82.50 $\pm$ 2.33
	70	95.14 $\pm$ 5.94	94.59 $\pm$ 4.28	75.28 $\pm$ 3.59	74.17 $\pm$ 5.77	<u>95.52 $\pm$ 5.89</u>	91.16 $\pm$ 2.90	77.07 $\pm$ 0.54	90.82 $\pm$ 0.85
	60	<u>96.07 $\pm$ 6.15</u>	96.36 $\pm$ 4.84	77.08 $\pm$ 1.77	<u>82.36 $\pm$ 4.60</u>	96.78 $\pm$ 6.04	<u>93.10 $\pm$ 3.57</u>	<u>77.74 $\pm$ 1.66</u>	<u>91.40 $\pm$ 1.37</u>
	50	96.80 $\pm$ 6.84	<u>94.63 $\pm$ 5.72</u>	<u>76.93 $\pm$ 1.37</u>	85.01 $\pm$ 2.03	92.49 $\pm$ 9.71	94.31 $\pm$ 3.73	81.14 $\pm$ 4.06	92.10 $\pm$ 1.31

Table 8: AP and AUC score for transductive dynamic link prediction with DyGFormer with random, historical, and inductive negative sampling strategies for various coverage rates. The best and second-best performing results are emphasized by bold and underlined fonts.

NSS	Coverage (%)	AP				AUC			
		Wikipedia	Reddit	UN Trade	Can. Parl.	Wikipedia	Reddit	UN Trade	Can. Parl.
rnd	100	99.11 ± 00.02	99.21 ± 00.01	65.37 ± 00.29	98.32 ± 00.19	99.01 ± 00.01	99.14 ± 00.01	69.06 ± 00.37	98.01 ± 00.18
	90	99.60 ± 00.03	99.64 ± 00.05	61.02 ± 05.45	99.04 ± 00.48	99.57 ± 00.04	99.62 ± 00.06	64.72 ± 03.46	98.81 ± 00.62
	80	99.86 ± 00.04	99.78 ± 00.05	67.45 ± 07.22	99.32 ± 00.22	99.86 ± 00.07	99.81 ± 00.09	<u>69.30 ± 03.73</u>	99.10 ± 00.41
	70	99.86 ± 00.05	<u>99.87 ± 00.02</u>	77.76 ± 01.59	99.05 ± 00.44	99.92 ± 00.05	<u>99.93 ± 00.01</u>	75.45 ± 0.03	98.49 ± 00.81
	60	99.93 ± 00.01	99.88 ± 00.01	62.40 ± 11.67	99.52 ± 00.52	99.96 ± 00.00	99.94 ± 00.01	65.46 ± 09.23	99.31 ± 00.83
	50	<u>99.92 ± 00.02</u>	99.13 ± 01.11	60.21 ± 03.03	99.72 ± 00.23	<u>99.96 ± 00.01</u>	99.65 ± 00.42	66.19 ± 04.06	99.67 ± 00.27
hist	100	74.60 ± 05.62	81.39 ± 01.49	60.73 ± 02.84	98.57 ± 00.12	75.00 ± 02.99	80.56 ± 00.46	70.70 ± 03.06	98.28 ± 00.18
	90	74.39 ± 03.53	84.42 ± 02.18	58.81 ± 02.81	98.97 ± 00.70	78.67 ± 02.87	86.48 ± 01.20	<u>63.94 ± 03.04</u>	98.68 ± 00.93
	80	82.89 ± 08.86	86.12 ± 02.04	<u>70.69 ± 08.71</u>	99.33 ± 00.28	85.53 ± 06.40	90.18 ± 01.19	71.99 ± 05.76	99.09 ± 00.48
	70	80.86 ± 08.52	87.13 ± 00.92	80.53 ± 7.57	98.97 ± 00.47	85.89 ± 07.03	<u>92.21 ± 00.37</u>	75.74 ± 9.98	98.31 ± 00.91
	60	71.71 ± 16.94	88.35 ± 02.93	57.65 ± 10.77	99.47 ± 00.55	79.09 ± 15.62	92.99 ± 01.11	58.43 ± 09.18	99.22 ± 00.90
	50	<u>77.36 ± 21.58</u>	89.47 ± 01.96	58.31 ± 04.63	99.67 ± 00.28	82.18 ± 23.39	89.45 ± 05.38	62.83 ± 06.28	99.60 ± 00.33
ind	100	67.87 ± 12.41	91.17 ± 00.79	56.47 ± 01.79	98.66 ± 00.10	69.88 ± 07.37	86.52 ± 00.82	65.25 ± 02.23	98.37 ± 00.16
	90	64.93 ± 06.60	95.11 ± 00.92	60.74 ± 03.45	99.20 ± 00.46	71.65 ± 05.05	93.89 ± 00.85	66.49 ± 03.17	99.00 ± 00.60
	80	<u>76.77 ± 09.48</u>	97.72 ± 00.95	<u>72.23 ± 08.04</u>	99.45 ± 00.29	80.53 ± 07.03	97.92 ± 01.19	74.00 ± 05.45	99.26 ± 00.48
	70	72.54 ± 15.14	<u>98.72 ± 00.81</u>	82.98 ± 6.71	99.05 ± 00.45	<u>78.35 ± 13.70</u>	<u>99.25 ± 00.39</u>	79.65 ± 06.71	98.50 ± 00.83
	60	68.53 ± 21.58	99.38 ± 00.38	64.11 ± 11.79	<u>99.53 ± 00.53</u>	73.34 ± 20.90	99.64 ± 00.14	67.77 ± 09.98	<u>99.33 ± 00.85</u>
	50	77.02 ± 28.63	95.00 ± 05.90	69.00 ± 05.72	99.74 ± 00.21	77.23 ± 31.64	92.84 ± 09.24	75.88 ± 05.65	99.69 ± 00.26

Table 9: AP and AUC score for inductive dynamic link prediction by DyGFormer with random, historical, and inductive negative sampling strategies for various coverage rates. The best and second-best performing results are emphasized by bold and underlined fonts.

NSS	Coverage (%)	AP				AUC			
		Wikipedia	Reddit	UN Trade	Can. Parl.	Wikipedia	Reddit	UN Trade	Can. Parl.
rnd	100	98.66 ± 00.04	98.73 ± 00.03	63.03 ± 00.26	93.13 ± 00.57	98.57 ± 00.02	98.58 ± 00.03	65.90 ± 00.32	91.36 ± 00.86
	90	99.38 ± 00.06	99.32 ± 00.08	59.56 ± 04.65	94.73 ± 00.87	99.35 ± 00.04	99.24 ± 00.09	62.68 ± 02.80	92.59 ± 00.69
	80	99.77 ± 00.04	99.66 ± 00.11	<u>66.13 ± 08.17</u>	95.93 ± 00.88	99.81 ± 00.07	99.66 ± 00.16	<u>67.06 ± 04.76</u>	94.09 ± 01.24
	70	<u>99.85 ± 00.05</u>	<u>99.81 ± 00.01</u>	76.05 ± 1.44	96.15 ± 00.22	99.89 ± 00.07	<u>99.89 ± 00.01</u>	73.26 ± 2.64	94.26 ± 00.29
	60	99.82 ± 00.04	99.81 ± 00.01	60.29 ± 11.96	<u>96.76 ± 01.56</u>	<u>99.90 ± 00.02</u>	99.89 ± 00.01	62.11 ± 09.78	<u>95.46 ± 02.24</u>
	50	99.85 ± 00.02	98.76 ± 01.44	56.92 ± 02.35	97.24 ± 01.56	99.92 ± 00.01	99.44 ± 00.66	61.56 ± 03.49	95.97 ± 02.34
hist	100	63.13 ± 09.13	61.80 ± 01.32	53.48 ± 01.52	93.41 ± 00.54	64.28 ± 06.05	62.78 ± 00.26	60.61 ± 02.21	91.79 ± 00.72
	90	61.22 ± 05.53	63.41 ± 01.09	58.02 ± 04.60	95.05 ± 00.88	65.74 ± 04.76	65.75 ± 00.30	62.86 ± 03.68	93.09 ± 00.65
	80	69.87 ± 06.59	63.68 ± 00.98	<u>65.44 ± 06.97</u>	96.29 ± 00.68	73.77 ± 05.50	67.94 ± 00.53	66.95 ± 04.56	94.54 ± 01.04
	70	<u>67.35 ± 12.76</u>	64.18 ± 01.47	79.83 ± 6.85	96.31 ± 00.27	<u>71.72 ± 12.03</u>	70.39 ± 00.87	75.73 ± 9.28	94.43 ± 00.39
	60	61.81 ± 14.01	65.11 ± 01.81	59.21 ± 10.25	<u>96.89 ± 01.42</u>	67.78 ± 16.27	70.18 ± 02.23	61.19 ± 08.50	95.60 ± 02.11
	50	66.38 ± 19.47	69.21 ± 04.52	61.33 ± 03.75	97.35 ± 01.50	70.91 ± 26.14	69.35 ± 06.52	<u>67.26 ± 04.67</u>	96.14 ± 02.24
ind	100	63.13 ± 09.15	61.77 ± 01.32	53.51 ± 01.51	93.42 ± 00.54	64.28 ± 06.05	62.76 ± 00.26	60.65 ± 02.20	91.81 ± 00.72
	90	61.19 ± 05.52	63.38 ± 01.09	58.04 ± 04.59	95.06 ± 00.88	65.72 ± 04.77	65.73 ± 00.30	62.88 ± 03.66	93.10 ± 00.65
	80	69.86 ± 06.60	63.66 ± 00.97	<u>68.95 ± 06.27</u>	96.30 ± 00.68	73.76 ± 05.49	67.92 ± 00.53	<u>69.82 ± 04.54</u>	94.55 ± 01.04
	70	<u>67.34 ± 12.78</u>	64.14 ± 01.46	79.85 ± 6.86	96.32 ± 00.27	<u>71.72 ± 12.04</u>	70.36 ± 00.86	75.76 ± 9.28	94.43 ± 00.39
	60	61.80 ± 14.02	<u>65.09 ± 01.80</u>	59.23 ± 10.25	<u>96.90 ± 01.41</u>	67.78 ± 16.27	<u>70.15 ± 02.24</u>	61.23 ± 08.51	<u>95.61 ± 02.11</u>
	50	66.40 ± 19.52	69.19 ± 04.50	61.34 ± 03.75	97.35 ± 01.51	70.92 ± 26.20	69.33 ± 06.48	67.27 ± 04.66	96.13 ± 02.25

Table 10: AUC for coverage-based dynamic node classification by DyGFormer for various coverage rates, with and without handling class imbalance. The best and second-best performing results are emphasized in bold and underlined fonts, respectively.

Coverage (%)	β	DyGFormer
		Wikipedia
100	= 1	87.04 ± 1.08
90	= 1	87.19 ± 0.86
	= 2	88.02 ± 1.87
80	= 1	88.47 ± 3.32
	= 2	<u>88.97 ± 2.37</u>
70	= 1	86.96 ± 3.60
	= 2	89.17 ± 4.72
60	= 1	83.79 ± 3.76
	= 2	83.42 ± 2.71